

PAGE 1 DOSNRM 109 XLM/DOS NON-RESIDENT MONITOR

.TITLE X/M/DOS V1A NON-RESIDENT MONITOR

[illegible]

.EJECT

/

/

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/

/	EDIT	#063	SK	2-JUL-73	
/		064	SK	28-AUG-73	UC15 F LPA/LPS/CDA/CDS
/		065	SK	20-SEP-73	UC15 F XVA/XVS
/		066	SK	16-OCT-73	E. 065 BUG FIX
/		067	SK	7-NOV-73	\$INSTRUCT TEXT DELETION +
/		068	SK	12-NOV-73	E. 067 BUG FIX
/		069	SK	13-NOV-73	GENERAL CLEAN UP
/					CREATION OF INSTRC PROG
/		070	SK+JMW	27-JUN-74	LOGIN & LOGOUT BUG FIX
/		071	BR	1-JULY-74	REMOVED FLUSH CMD FIXED X4K IN SCOM CMD
/		072	EK	14-JULY-74	CHANGE SIGNON VERSION NUMBER
/		073	BR	15-JULY-74	FIXED MAC11 API PROBLEM
/		074	EAG	1-AUG-74	FIXED HANDLING OF "ALL POS. .DAT SLOTS"
/					.DAT SLOT PRINTOUT FOR SYSTEM PROGRAMS
/					IN REQUEST COMMAND
/		075	SK	22-NOV-74	\$POLLR ON/OFF COMMAND
/		076	SK	6-DEC-74	CHANGE TO: V3B000.POLLER ON/OFF
/		077	BR	22-DEC-74	AUTOMATE SPLOAD API OFF ACTION
/		078	EAG	2-JAN-75	CHANGE LOGIN/LOGOUT SO THAT CTRL-X
/					WILL BE LEFT ON (IF POSSIBLE)
/		079	EAG	17-JAN-75	MODIFY REQUEST COMMAND SO THAT IT
/					WILL KNOW ABOUT THE EDITORS USE
/					OF .DAT SLOT -12 AND DESCRIBE IT'S
/					AS "LISTING".
/		080	BLR	26-MAY-75	UPGRADE TO XVM COMMAND SET
/		081	BLR	2-JUN-75	CONTINUE XVM UPGRADE
/		082	BLR	17-JUN-75	ADD MODE ROUTINES
/		083	BLR	20-JUN-75	ADD MEMSIZ ROUTINES
/		084	BLR	23-JUN-75	SHORTEN MEMSIZ ROUTINE
/		085	BLR	24-JUN-75	DEBUG NRM : MODE, MEMSIZ, BANK/PAGE
/		086	BLR	25-JUN-75	CLEANUP SCOM MSG
/		087	BLR	08-JUL-75	CAUSE MODE MSG TO APPEAR AT
/					RESTART OF NRM AFTER MODE CHNG.
/		088	BLR	08-JUL-75	CHECK ILLEGAL PROTECTS.
/					MAKE CR ILLEGAL IN MEMSIZ
/		089	BLR	17-JUL-75	REMOVE MAC11/SPLOAD API KLUDGE.
/					REMOVE MODE CODE FROM DATE.
/					ADD MCLOAD TO REQUEST.
/					FIX SCOM LOOP AND BUG.
/					CHANGE REQUEST TO USE LESS TRANSFER.
/					VECTORS
/		090	BLR	19-JUL-75	CAUSE MODE TO OCCUR AFTER DATE HELLO
/		091	BLR	22-JUL-75	ADD .DAT -13 TO EDIT REQUEST
/		092	BLR	23-JUL-75	ADD UIC MSG TO MODE
/		093	BLR	1-AUG-75	SPEED UP MODE MSG
/		094	BLR	6-AUG-75	GET/PUT FIXUP, DELETE RCOM TABLE
/		095	GAR	15-AUG-75	ADD ABILITY TO BATCH FROM SY.

80	/				DP, RK, DK, DT, OR MT.
81	/		096	MJH	20-AUG-75
82	/		097	BLR	20-AUG-75
83	/		098	GAR	29-AUG-75
84	/		099	GAR	11-SEP-75
85	/				DISCLAIMER
86	/				ELIMINATE NEED FOR UC15 VERSION
87	/				ADD 'SY' DEVICE MAPPING TO ASSIGN COMMAND.
88	/				FIX BUG IN BOSS WHICH CAUSED AN IOPS0
89	/				ON SECOND 'BOSS' COMMAND WHEN BOSS NOT
90	/				IN COMBLK.
91	/		100	GAR	18-SEP-75
92	/				CHANGE HELLO TO 'V1A000'.
93	/	101	29-SEP-75	EAG	DELETE UNICHANNEL VARIATION OF
94	/				HELLO MESSAGE. REVISE GET/PUT
95	/				COMMANDS IN ACCORDANCE WITH
96	/				X/M/DOS RESIDENT MONITOR.
97	/				DO THE SAME WITH VT ON/OFF.
98	/				FIX A FEW SUBTLETIES RELATED
99	/				TO NON-BOSS BATCH. DELETE
100	/				LOGIC TO DETERMINE RIGHT # OF
101	/				BUFFERS FOR ALL PROGRAMS, AS
102	/				THIS IS DONE BY RESMON. LEAVE
103	/				BUFFS COMMAND, OF COURSE, AND
104	/				HAVE IT ADD AN EXTRA BUFFER IF
105	/				BOSS OR BATCH IS ACTIVE.
106	/				MODIFY REQUEST SO .DAT SLOT -2
107	/				WILL PRINT OUT ASSIGNED TO CMD
108	/				DEVICE, RATHER THAN TTA.
109	/				DELETE EXCESSIVE MODE MESSAGES
110	/				BY NOP'ING JMS'S TO SETMD.
111	/				BOSS LISTINGS.
112	/	102	03-OCT-75	RKB	FIX A PROBLEM WHICH WAS CAUSING
113	/				THE '\$' PROMPT TO BE PRINTED ON
114	/				BOSS LISTINGS.
115	/	103	09-OCT-75	EAG	CHANGE SET UP CODE SO THAT
116	/				.UFDT -7 WILL ALWAYS BE SET TO
117	/				SYS. THIS FIXES PROBLEM OF
118	/				THE REQUEST COMMAND LISTING
119	/				IOS AS THE UIC FOR SLOT -7.
120	/	104	10-OCT-75	GAR	FIX FOR BOSS \$ PROMPT PROBLEM
121	/	105	16-OCT-75	RKB	MAKE MORE COMMANDS LEGAL IN BATCH
122	/				MODE, AND PASS \$JOBS BACK TO
123	/				THE NON-RES MONITOR.
124	/	106	10-NOV-75	RKB	CHANGE \$BATCH COMMAND TO ACCEPT
125	/				DEVICES OF ANY FLAVOR. ALSO,
126	/				FIX \$TIME TO ACCEPT TIME OF '0000'.
127	/				ALSO, CHANGE \$TIMEST TO HAVE A
128	/				DEFAULT TIME LIMIT OF 1 MIN, NOT
129	/				1 SECOND.
130	/	107	11-NOV-75	RKB	PUT IN TOMORROWS DATE CALENDER.
131	/				

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132 /
133 / 108 17-NOV-75 RKB PUT IN CHANGE TO $BATCH COMMAND
134 / DECODER TO ALLOW TRAILING BLANKS
135 / AFTER FILENAME.
136 / ALSO, PUT IN A CHECK OF THE SIZE
137 / OF NON-RES MONITOR TO CAUSE AND
138 / ASSEMBLY ERROR IF WE ATTEMPT TO
139 / SLOP ABOVE LOCATION 16077 OF THE
140 / BANK WE'RE RUNNING IN. THIS WOULD
141 / CAUSE US TO CLOBBER SGNBLK, ETC.
142 / WHO LIVE IN CORE STARTING AT
143 / LOCATION 16100.
144 /
145 / 109 30-NOV-75 GAR MODIFY REQUEST COMMAND SO THAT IT
146 / KNOWS ABOUT EDIT/T AND EDIT/P'S
147 / USE OF .DAT -13 FOR SECONDARY OUTPUT.
148 /
149 /
150 / DEFINE*****NOMODE*****FOR NO AUTOMATIC MODE TYPEOUTS***** (MODE COMMAND STILL
151 / WILL FUNCTION)
152 /
153 / MACRO TO PRODUCE OFFSETS INTO REQUEST MESSAGE TABLE
154 /
155 / .DEFIN MSG,NR
156 / MS0NR-MSGTAB /OFFSET INTO MSGTAB TABLE
157 / .ENDM
158 /
159 000171 A SC.TDT=.SCOM+71 / (RKB-107) TOMORROWS DATE WORD
160 000147 A SC.DAY=.SCOM+47 / (RKB-107) TODAYS DATE WORD
161 /
162 /
163 / MESSAGE NUMBERS MUST BE OF THE FORM MS#
164 /
165 /
166 / MACRO TO PRODUCE DUMMY HEADERS FOR ASCII MESSAGES
167 /
168 / .DEFIN HDR
169 / 377002
170 / 000000
171 / .ENDM
172 /
173 /

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174                                     .TITLE X/M/DOS NRM
175                                     /KEYBOARD LISTENER
176                                     ARG=0
177                                     SHAL=660000
178                                     JMS
179                                     LAC      :-1
180      B 000002 R 511510 R      AND      (60000
181      000003 R 047666 R      DAC      BANKBT
182      B 000004 R 211511 R      LAC      (SYSBLK
183      000005 R 347666 R      TAD      BANKBT
184      000006 R 047733 R      DAC      .SYSBL
185      B 000007 R 211512 R      LAC      (SGNBLK
186      000010 R 347666 R      TAD      BANKBT
187      000011 R 047734 R      DAC      .SGNBL
188      B 000012 R 357100 A      TAD      SGNBLK
189      000013 R 047735 R      DAC      LSGNBL
190      B 000014 R 211513 R      LAC      (COMBLK
191      000015 R 347666 R      TAD      BANKBT
192      000016 R 047736 R      DAC      .COMBL
193      B 000017 R 231514 R      LAC*     (.SCOM+24
194      000020 R 740031 A      TCA
195      000021 R 047667 R      DAC      .DATAD
196      000022 R 777766 A      LAW      17766
197      B 000023 R 371515 R      TAD*     (.SCOM+23
198      000024 R 047725 R      DAC      DATM12
199      000025 R 227725 R      LAC*     DATM12
200      000026 R 047731 R      DAC      LPADDR
201      B 000027 R 231516 R      LAC*     (.SCOM+7
202      000030 R 067725 R      DAC*     DATM12
203      000031 R 040554 R      DAC      PRTMP
204      B 000032 R 231517 R      LAC*     (.SCOM+4
205      B 000033 R 511520 R      AND      (100
206      000034 R 751200 A      SNA!CLA
207      B 000035 R 211521 R      LAC      (156274
208      B 000036 R 351522 R      TAD      (021613
209      000037 R 047550 R      DAC      LDRUIC
210      B 000040 R 231523 R      LAC*     (.SCOM+41
211      000041 R 547550 R      SAD      LDRUIC
212      B 000042 R 211524 R      LAC      (233123
213      B 000043 R 071523 R      DAC*     (.SCOM+41
214      000044 R 777762 A      LAW      -16
215      B 000045 R 371525 R      TAD*     (.SCOM+25
216      000046 R 047547 R      DAC      P1
217      000047 R 723007 A      AAC 16-7
218      000050 R 046750 R      DAC CT1
219      B 000051 R 211524 R      LAC (233123)
220      000052 R 066750 R      DAC* CT1
221      000053 R 777763 A      LAW      -15
222      000054 R 347667 R      TAD      .DATAD
223      000055 R 046750 R      DAC      CT1
224      000056 R 447547 R      SYSRES 1S2 P1
225      000057 R 227547 R      LAC* P1

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KEYBOARD LISTENER

/BANK BIT INITIALIZATION

/ - (# OF POS .DAT SLOTS)

/TWOCMA (BR-080)

/SAVE CONTENTS OF .DAT -12 AND LP HANDLER

/ADDRESS (IF ANY) IN CASE A LINE PRINTER

/EXISTS AND LP ON WAS TYPED.THEN SOME OUTPUT

/WILL GO TO THE LINE PRINTER.

/RESTORE ALL ENTRIES IN UFD

/TABLE THAT HAVE EITHER 'BNK'

/OR 'PAG' TO 'SYS'.

/ POINT CT1 TO .UFDT -7 /EAG:103

/EAG:103

/ AND SET .UFDT -7 TO SYS /EAG:103

/EAG:103

/ BUMP POINTER TO NEXT SLOT /EAG:103

/ PICK UP .UFDT SLOT CONTENTS /EAG:103

226		00060 R	547550 R	SAD LDRUIC	/ IS IT BNK/PAG?	/EAG:103
227	B	00061 R	211524 R	LAC (233123)	/ YES -- SUBSTITUTE SYS	/EAG:103
228		00062 R	067547 R	DAC* P1	/ AND PUT BACK INTO SLOT	/EAG:103
229		00063 R	446750 R	ISZ CT1		/EAG:103
230		00064 R	600056 R	JMP SYSRES		/EAG:103
231	B	00065 R	231515 R	LAC* (.SCOM+23	/COMPUT ADDRESS OF:	
232		00066 R	723776 A	AAC -2		
233		00067 R	047672 R	DAC DATM2	/ .DAT -2	
234		00070 R	723003 A	AAC 3		
235		00071 R	047673 R	DAC DAT1	/ .DAT +1	
236		00072 R	723004 A	AAC 4		
237		00073 R	047670 R	DAC DAT5	/ .DAT +5	
238		00074 R	740030 A	IAC		
239		00075 R	047671 R	DAC DAT6	/ .DAT +6	
240	B	00076 R	217101 A	LAC NOPAR	/ COMPUTE ADDRESS OF BEGINNING	
241	B	00077 R	357102 A	TAD NODAT	/ OF I/O DEVICE TABLE IN SGNBLK	
242	B	00100 R	357103 A	TAD NOSKP		
243		00101 R	740030 A	IAC		
244		00102 R	347734 R	TAD .SGNBL		
245		00103 R	047674 R	DAC SGNTAB		
246	B	00104 R	231526 R	LAC* (.SCOM+42	/ RETURN FROM NRM EXIT? (BR-094)	
247	B	00105 R	511527 R	AND (200000		
248		00106 R	740200 A	SZA	/ NO	
249		00107 R	600116 R	JMP NOSETP	/ YES	
250	B	00110 R	231526 R	LAC* (.SCOM+42	/ 'KEEP' ON?	
251	B	00111 R	511530 R	AND (2		
252		00112 R	740200 A	SZA	/NO	
253		00113 R	600116 R	JMP NOSETP	/YES	
254		00114 R	106751 R	JMS UFDUPD	/SET UP UFD TABLE	
255		00115 R	107023 R	JMS DATSTP	/ SET UP .DAT TABLE	
256	B	00116 R	217077 A	LAC COMBLK	/ TOP OF COMBLK	
257		00117 R	347733 R	TAD .SYSBL		
258	B	00120 R	057077 A	DAC COMBLK		
259		00121 R	001776 A	1776	/ .INIT -2,1,NRMEXI	
260		00122 R	000001 A	1		
261		00123 R	207636 R	200000+CTRLC		
262		00124 R	000000 A	0		
263	B	00125 R	231531 R	LAC* (.SCOM+52		
264		00126 R	741100 A	SPA		
265	B	00127 R	251532 R	XOR (20000		
266	B	00130 R	071531 R	DAC* (.SCOM+52		
267				.INIT -3,1,CTRLP		
		00131 R	001775 A	CAL+1*1000 -3&777		
		00132 R	000001 A	1		
		00133 R	000305 R	CTRLP+0		
		00134 R	000000 A	0		
268	B	00135 R	231526 R	LAC* (.SCOM+42		
269	B	00136 R	511527 R	AND (200000		
270		00137 R	740200 A	SZA		
271		00140 R	600167 R	JMP CLEXIT		
272	B	00141 R	231531 R	LAC* (.SCOM+52	/SKIP IF IN BOSS X/M MODE	
273		00142 R	741100 A	SPA		

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274		00143 R 600167 R	JMP	CLEXIT	
275		00144 R 100440 R	JMS	TYPE	/ TYPE MONITOR HELLO
276		00145 R 001232 R	KLBUF2-2		/ MESSAGE
277	B	00146 R 231533 R	LAC*	(.SCOM+47	/GET DATE FROM .SCOM (BR-097)
278		00147 R 740200 A	SZA		
279		00150 R 600167 R	JMP	CLEXIT	
280		000151 R	REQDAT=.		
281		00151 R 100440 R	JMS	TYPE	
282		00152 R 001302 R	KLBUF8-2		
283			.READ	-2,2, KLBUFF,80	
		00153 R 002776 A *G	CAL+2*1000	-2&777	
		00154 R 000010 A *G	10		
		00155 R 010017 R *G	KLBUFF+0		
			.DEC		
		00156 R 777660 A *G	-80+0		
284	B	00157 R 211534 R	LAC	(KLBUFF+2	
285		00160 R 047701 R	DAC	KLGETP	
286		00161 R 777777 A	LAW	-1	
287		00162 R 047702 R	DAC	KLGET5	
288		00163 R 140056 R	DZM	SYSRES	
289			.WAIT	-2	
		00164 R 000776 A *G	CAL	-2&777	
		00165 R 000012 A *G	12		
290		00166 R 604445 R	JMP	KLDATE	
291	B	00167 R 231526 R	CLEXIT	LAC*	(.SCOM+42
292	B	00170 R 511535 R	AND	(577777	/GET BIT SWITCH SCOM WORD (BR-087)
293	B	00171 R 071526 R	DAC*	(.SCOM+42	/CLEAR RETURN TO NRM BIT (BR-087)
294	B	00172 R 231533 R	LAC*	(SC.DAY)	
295		00173 R 741200 A	SNA		/(RKB-107) GET TODAY'S DATE
296		00174 R 600247 R	JMP	TDT.2	/(RKB-107) IS IT VALID?
297		00175 R 040440 R	DAC	NR.DAY	/(RKB-107) NO, SKIP THIS
298		00176 R 723100 A	AAC	100	/(RKB-107) ADD ONE TO DAY OF MONTH
299		00177 R 040440 R	DAC	NR.DAY	/(RKB-107) THAT IS USUALLY ALL WE NEED
300		00200 R 746020 A	CLL!RTR		/(RKB-107) IS THIS A LEAP YEAR?
301		00201 R 741100 A	SPA		/(RKB-107) SKIP IF YES
302		00202 R 744002 A	STL		/(RKB-107) NO, SET THE LINK
303	B	00203 R 511536 R	AND	(770000/4)	/(RKB-107) STRIP OFF THE MONTH
304	B	00204 R 551537 R	SAD	(40000/4)	/(RKB-107) CHECK FOR 30-DAY MONTHS, APRIL
305		00205 R 777775 A	LAW	-3	/(RKB-107)
306	B	00206 R 551540 R	SAD	(60000/4)	/(RKB-107) JUNE, 30-DAY
307		00207 R 777775 A	LAW	-3	/(RKB-107)
308	B	00210 R 551541 R	SAD	(110000/4)	/(RKB-107) SEPTEMBER, 30-DAY
309		00211 R 777775 A	LAW	-3	/(RKB-107)
310	B	00212 R 551542 R	SAD	(130000/4)	/(RKB-107) NOVEMBER, 30-DAY
311		00213 R 777775 A	LAW	-3	/(RKB-107)
312	B	00214 R 551543 R	SAD	(20000/4)	/(RKB-107) WHEN SHORT FEBRUARY'S DONE...
313		00215 R 741000 A	SKP		/(RKB-107)
314		00216 R 600221 R	JMP	+.3	/(RKB-107) NOT FEB.
315		00217 R 750001 A	CLC; RAL		/(RKB-107) FEBRUARY
		00220 R 740010 A			
316		00221 R 740100 A	SMA		/(RKB-107) SPECIAL MONTH?, YES SKIP
317		00222 R 777774 A	LAW	-4	/(RKB-107) ALL THE REST HAVE 31.

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318      00223 R 723744 A      AAC      -34      /(RKB-107)
319      00224 R 740031 A      TCA      /(RKB-107) BUILD MASK FOR LAST DAY
320      00225 R 660706 A      ALSS      6      /(RKB-107) ...
321      00226 R 240440 R      XOR      NR.DAY      /(RKB-107) ARE WE THERE?
322      B 00227 R 511544 R      AND      (7700)      /(RKB-107)
323      00230 R 740200 A      SZA      /(RKB-107) SKIP IF YES, NEED TO DO MONTH
324      00231 R 600245 R      JMP      TDT.1      /(RKB-107) NO, SAME MONTH
325      00232 R 770077 A      LAW      770077      /(RKB-107) SAVE MONTH AND YEAR
326      00233 R 500440 R      AND      NR.DAY      /(RKB-107) BUT DAY 0
327      B 00234 R 351545 R      TAD      (10000+100)      /(RKB-107) NEXT MONTH, DAY ONE
328      00235 R 040440 R      DAC      NR.DAY      /(RKB-107) OK.
329      B 00236 R 511546 R      AND      (770000)      /(RKB-107) NOW DID THAT MAKE 13TH MONTH?
330      B 00237 R 551547 R      SAD      (150000)      /(RKB-107) ...
331      00240 R 741000 A      SKP      /(RKB-107)
332      00241 R 600245 R      JMP      TDT.1      /(RKB-107) NO, ALL DONE
333      B 00242 R 211550 R      LAC      (-140000+1)      /(RKB-107) YEAR + 1, MONTH ONE (DAY ALREADY
334      00243 R 340440 R      TAD      NR.DAY      /(RKB-107) SET TO ONE)
335      00244 R 040440 R      DAC      NR.DAY      /(RKB-107)
336      00245 R 200440 R      TDT.1 LAC      NR.DAY      /(RKB-107) NOW MOVE IT TO SCOM
337      B 00246 R 071551 R      DAC*     (SC.TDT)      /(RKB-107)
338      000247 R      TDT.2=.      /(RKB-107)
339      B 00247 R 231531 R      LAC*     (.SCOM+52      /SKIP IF IN BOSS XVM MODE
340      00250 R 740100 A      SMA      /SKIP IF BOSS (BR-090)
341      00251 R 600320 R      JMP      KLOK      /NOT BOSS-SEE IF MODE TYPEOUT IS NEEDED (BR-090)
342      B 00252 R 511552 R      AND      (000001      /BOSS JOB ABORT ? (BR-090)
343      00253 R 740200 A      SZA      /SKIP IF NOT (BR-090)
344      00254 R 607272 R      JMP      BOSS15      /YES - GO ABORT (BR-090)
345      00255 R 600263 R      JMP      KLOKRD      /EVEN IF ITS NOT AN ABORT,      /RKB-102
346      /DON'T PROMPT WITH BOSS.      /RKB-102
347      B 00256 R 231531 R      KLOK1   LAC*     (.SCOM+52) / (GAR-104) IF BOSS IS RUNNING DON'T PROMPT.
348      00257 R 741100 A      SPA      / (GAR-104) IS BOSS RUNNING?
349      00260 R 600263 R      JMP      KLOKRD      / (GAR-104) YES.
350      00261 R 100440 R      JMS      TYPE      / (GAR-104) TYPE $ PROMPT CHARACTER
351      00262 R 001242 R      KLBUFF3-2
352      00263 R      KLOKRD   .READ      -2,2,KLBUFF,80      /READ TTI
353      00263 R 002776 A *G      CAL+2*1000 -2&777
354      00264 R 000010 A *G      10
355      00265 R 010017 R *G      KLBUFF+0
356      *G      .DEC
357      00266 R 777660 A *G      -80+0
358      B 00267 R 211534 R      LAC      (KLBUFF+2      /SET UP GET ROUTINE
359      00270 R 047701 R      DAC      KLGETP      /KLGET POINTER
360      00271 R 777777 A      LAW      -1
361      00272 R 047702 R      DAC      KLGET5
362      .WAIT      -2
363      00273 R 000776 A *G      CAL      -2&777
364      00274 R 000012 A *G      12
365      00275 R 600636 R      JMP      .MCD
366      000276 R      FLUSH=.
367      00276 R 200056 R      LAC      SYSRES
368      00277 R 741200 A      SNA
369      00300 R 600151 R      JMP      REQDAT

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363 B 00301 R 217777 A LAC STOPER
364 00302 R 740100 A SMA
365 00303 R 600320 R JMP KLOK
366 00304 R 607663 R JMP NRM.2
367
368
369
370
371 00305 R 000305 R /
372 00306 R 202113 R CTRLP=. LAC LOGWF
373 B 00307 R 231531 R SNA
374 00310 R 740100 A LAC* (.SCOM+52
375 00311 R 600314 R JMP .+3
376 00312 R 202115 R LAC WTIME1
377 B 00313 R 071553 R DAC* (134
378 00314 R 202114 R LAC WTIME
379 B 00315 R 071554 R DAC* (.SCOM+56
380 00316 R 200554 R LAC PRTMP
381 00317 R 067725 R DAC* DATM12
382 000320 R KLOK=.
383 000320 R KLOKLF=.
384 00320 R 227725 R LAC* DATM12
385 00321 R 040554 R DAC PRTMP
386 B 00322 R 231531 R LAC* (.SCOM+52
387 00323 R 741100 A SPA
388 00324 R 600263 R JMP KLOKRD
389 00325 R 100440 R JMS TYPE
390 00326 R 001264 R KLBUF6-2
391 .IFUND NOMODE
392 B 00327 R 231526 R LAC* (.SCOM+42
393 B 00330 R 511543 R AND (004000
394 00331 R 741200 A SNA
395 00332 R 600256 R JMP KLOK1
396 00333 R 105326 R JMS DOMODE
397 B 00334 R 231526 R LAC* (.SCOM+42
398 B 00335 R 511555 R AND (773777
399 B 00336 R 071526 R DAC* (.SCOM+42
400 00337 R 100440 R JMS TYPE
401 00340 R 001264 R KLBUF6-2
402 .ENDC
403 00341 R 600256 R JMP KLOK1

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/NON-BATCH PROCESS

/(RKB-106) RIGGED SO THAT AN ERROR ON A \$BATCH COMMAND

/(RKB-106) WILL CAUSE US TO LEAVE BATCH MODE.

/(RKB-106) EXPECIALLY NICE IN CASE OF 'CHAINED' \$BATCH'ES

/RESTORE RUN TIME TO ITS

/VALUE BEFORE LOGW.

/RESTORE .DAT -12

/IN CASE .DAT -12 WAS CHANGED

/SAVE ITS NEW VALUE.

/BOSS X/M MODE?

/NO.

/YES. DO NOT TYPE \$

/ TYPE LINE FEED

/GET DO MODE TYPEOUT BIT (BR-090)

/TEST DO MODE BIT (BR-090)

/SKIP IF DO MODE (BR-091)

/DON'T DO MODE - READ LINE (BR-091)

/TYPE MODE INFO OUT (BR-090)

/GET MODE WORD (BR-090)

/CLEAR OUT DOMODE BIT - IF SET (BR-090)

/SAVE WORD (BR-090)

/TYPE OUT ANOTHER LINE FEED (BR-090)

/GO READ LINE (BR-090)

## .TITLE X/M/DOS NRM

## ERROR ROUTINES

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000342 R  
00342 R 100460 R  
00343 R 001220 R  
00344 R 600276 R  
  
00345 R 100460 R  
00346 R 001246 R  
00347 R 600276 R  
  
00350 R 100460 R  
00351 R 001320 R  
00352 R 600276 R  
000353 R  
00353 R 100460 R  
00354 R 001412 R  
00355 R 600276 R  
000356 R  
00356 R 100460 R  
00357 R 001426 R  
00360 R 600276 R  
  
00361 R 100460 R  
00362 R 001254 R  
00363 R 600276 R  
  
00364 R 100460 R  
00365 R 001270 R  
00366 R 600276 R  
  
00367 R 100460 R  
00370 R 001354 R  
00371 R 600276 R  
  
00372 R 100460 R  
00373 R 001372 R  
00374 R 600276 R  
000375 R  
00375 R 100460 R  
00376 R 001400 R  
00377 R 600276 R  
000400 R  
00400 R 100460 R  
00401 R 001442 R  
00402 R 600276 R  
000403 R  
00403 R 100460 R  
00404 R 001460 R  
00405 R 600276 R  
000406 R

KLWHAT=.  
JMS PRERR  
ARG KLBUF1-2  
JMP FLUSH  
/ILLEGAL DEVICE  
KLILLD JMS PRERR  
ARG KLBUF4-2  
JMP FLUSH  
/ILLEGAL UNIT NO.  
KLBADU JMS PRERR  
ARG KLBUFA-2  
JMP FLUSH  
ILLCOD=.  
JMS PRERR  
ARG CODERR-2  
JMP FLUSH  
ILLONF=.  
JMS PRERR  
ARG ONFERR-2  
JMP FLUSH  
/ILLEGAL .DAT SLOT  
KLBDAT JMS PRERR  
ARG KLBUF5-2  
JMP FLUSH  
/ILLEGAL MODIFICATIONS  
KLNMOD JMS PRERR  
ARG KLBUF7-2  
JMP FLUSH  
/BAD COMMAND IN BATCH MODE  
KLBBM JMS PRERR  
ARG KLBUFH-2  
JMP FLUSH  
/BAD UIC CONSTRUCTION  
/  
FETUER JMS PRERR  
ARG FETER-2  
JMP FLUSH  
BADGET=.  
JMS PRERR  
ARG GETERR-2  
JMP FLUSH  
BADINS=.  
JMS PRERR  
ARG INSER-2  
JMP FLUSH  
BADIGT=.  
JMS PRERR  
ARG DIGERR-2  
JMP FLUSH  
BADATE=.

/WRITE WHAT  
/NEXT MESSAGE

456		00406 R 100460 R	JMS	PRERR	
457		00407 R 001500 R	ARG	DATERR-2	
458		00410 R 600276 R	JMP	FLUSH	
459		000411 R	BADTIM=.		
460		00411 R 100460 R	JMS	PRERR	
461		00412 R 001512 R	ARG	TIMERR-2	
462		00413 R 600276 R	JMP	FLUSH	
463		000414 R	BADLIM=.		
464		00414 R 100460 R	JMS	PRERR	
465		00415 R 001524 R	ARG	LIMERR-2	
466		00416 R 600276 R	JMP	FLUSH	
467		000417 R	BADCHN=.		
468		00417 R 100460 R	JMS	PRERR	
469		00420 R 001556 R	ARG	CHNERR-2	
470		00421 R 600276 R	JMP	FLUSH	
471		000422 R	BADHNO=.		
472		00422 R 100460 R	JMS	PRERR	
473		00423 R 001574 R	ARG	HNOERR-2	
474		00424 R 600276 R	JMP	FLUSH	
475		000425 R	BADBOS=.		
476		00425 R 105006 R	JMS	BOSTTY	
477		00426 R 100460 R	JMS	PRERR	
478		00427 R 001612 R	ARG	BOSERR-2	
479	B	00430 R 171531 R	DZM*	(152	
480		00431 R 607643 R	JMP	NRMEXI	
481		000432 R	BADUNT=.		
482		00432 R 100460 R	JMS	PRERR	
483		00433 R 001634 R	ARG	UNTERR-2	
484		00434 R 600276 R	JMP	FLUSH	
485		000435 R	MSZBAD=.		
486		00435 R 100460 R	JMS	PRERR	/PRINT ERROR MEMSIZ ILLEGAL (BR-082)
487		00436 R 001646 R	ARG	BADMSZ-2	/"
488		00437 R 600276 R	JMP	FLUSH	/TRY AGAIN (BR-082)

```

489                                     .TITLE XMM/DOS NRM      'TYPE'
490                                     /TYPE SUBROUTINE
491                                     /CALLING SEQUENCE:
492                                     /      JMS TYPE
493                                     /      BUFFER ADDRESS
494                                     /      (RETURN)
495
496                                     000440 R NR.DAY=.          / (RKB-107) TEMPORARY
497
498                                     TYPE      0
499      B 00441 R 231531 R LAC*      (152
500      00442 R 040457 R DAC      BOSOUT
501      00443 R 220440 R LAC* TYPE  /GET BUFFER ADDRESS
502      00444 R 040447 R DAC .+3
503      00445 R 002775 A CAL+2775
504      00446 R 000011 A 11
505      00447 R 740040 A XX
506      00450 R 777720 A -60
507      00451 R 200457 R LAC      BOSOUT
508      B 00452 R 071531 R DAC*      (152
509      00453 R 000775 A CAL+775
510      00454 R 000012 A 12
511      00455 R 440440 R ISZ TYPE  /TO RETURN
512      00456 R 620440 R JMP* TYPE
513      00457 R 000000 A BOSOUT 0
514      00460 R 000000 A PRERR 0
515      00461 R 220460 R LAC*      PRERR /BANK BIT INIT BUFFER
516      B 00462 R 511556 R AND      (17777 /ADDRESS
517      00463 R 347666 R TAD      BANKBT
518      00464 R 040466 R DAC      .+2
519      00465 R 100440 R JMS      TYPE
520      00466 R 000000 A 0
521      00467 R 440460 R ISZ      PRERR
522      00470 R 620460 R JMP*      PRERR

```



.TITLE XMM/DOS NRM 'PRINT'

/

/PRINT SUBROUTINE

/CALLING SEQUENCE:

/ JMS PRINT

/ BUFFER ADDRESS

/ (RETURN)

/ROUTINE 'PRINT' PRINTS A .ASCII LINE TO THE LINE

/PRINTER, OR WHATEVER IS ASSIGNED TO .DAT -12

PRNFST 0

00471 R 000000 A

00472 R 231531 R

00473 R 740100 A

00474 R 600501 R

LAC\* (152 /BOSS15 MODE?

SMA

/YES, SKIP AND TYPE FORM FEED TO .DAT -3

JMP PRNF.1

.WRITE -3,2,FORMFD-2.4

00475 R 002775 A \*G

CAL+2\*1000 -3&amp;777

00476 R 000011 A \*G

11

00477 R 001552 R \*G

FORMFD-2+0

.DEC

-4+0

00500 R 777774 A \*G

PRNF.1=.

00501 R 000501 R

00502 R 211557 R

00503 R 040534 R

00504 R 200471 R

00505 R 040506 R

00506 R 741000 A

LAC (1766

DAC PRINIT

LAC PRNFST

DAC PRINT

SKP

PRINT=.

00507 R 000000 A

00508 R 231531 R

00509 R 740100 A

00510 R 600515 R

00511 R 200506 R

00512 R 040440 R

00513 R 600441 R

00514 R 220506 R

00515 R 740030 A

0

LAC\* (152

SMA

JMP .+4

LAC PRINT

DAC TYPE

JMP TYPE+1

LAC\* PRINT

IAC

00517 R 071560 R

DAC\* (16

00520 R 211561 R

LAC (PRNTBF+1

00521 R 071562 R

DAC\* (17

00522 R 211563 R

LAC (-56

00523 R 040555 R

DAC PRTMP1

00524 R 220016 A

LAC\* 16

00525 R 060017 A

DAC\* 17

00526 R 440555 R

ISZ PRTMP1

00527 R 600524 R

JMP .-3

00530 R 227725 R

LAC\* DATM12

/SET UP .DAT -12

00531 R 040554 R

DAC PRTMP

00532 R 207731 R

LAC LPADDR

00533 R 067725 R

DAC\* DATM12

PRINIT

00534 R

.INIT -12,1,CTRLP

00534 R 001766 A \*G

CAL+1\*1000 -12&amp;777

00535 R 000001 A \*G

1

00536 R 000305 R \*G

CTRLP+0

		00537	R	000000	A	*G	0		
567	B	00540	R	211564	R		LAC	(JMP PRWRIT	
568		00541	R	040534	R		DAC	PRINIT	
569				000542	R		PRWRIT=.		
570								.WRITE -12,2,PRNTBF,48	
		00542	R	002766	A	*G		CAL+2*1000 -12&777	
		00543	R	000011	A	*G		11	
		00544	R	000556	R	*G		PRNTBF+0	
						*G		.DEC	
		00545	R	777720	A	*G		-48+0	
571								.WAIT -12	
		00546	R	000766	A	*G		CAL -12&777	
		00547	R	000012	A	*G		12	
572		00550	R	200554	R		LAC	PRTMP	/RESTORE .DAT -12
573		00551	R	067725	R		DAC*	DATM12	
574		00552	R	440506	R		ISZ	PRINT	
575		00553	R	620506	R		JMP*	PRINT	
576		00554	R	000000	A		PRTMP	0	
577		00555	R	000000	A		PRTMP1	0	
578		00556	R	022002	A		PRNTBF	022002	
579		00557	R		A			.BLOCK 57	

## .TITLE X/M/DOS NRM COMMAND DECODER

/COMMAND DECODER

.MCD=.

580			000636 R			
581				LAC	(740000	/RESET 'SKIP IF BOSS15' FLAG
582				DAC	SKPBOS	
583				LAC	(12	/DUMMY LINEFEED
584				DAC	KLCHAR	/WILL CAUSE LEADING LF+BLNKS TO BE IGNORED
585	B	00636 R	211565 R	JMS	KLPESH	/GET COMMAND IN KLCOM.
586		00637 R	047314 R	LAC	KLCOM	/WAS THERE A COMMAND?
587	B	00640 R	211566 R	SNA		/YES, CONTINUE.
588		00641 R	047675 R	JMP	KLOK	/NO, READ NEXT COMMAND.
589		00642 R	106147 R	JMS	KLTABL	/IS COMMAND LEGAL?
590	B	00643 R	210007 R	FULCMD		
591		00644 R	741200 A	CMDISP		
592		00645 R	600320 R	JMP	LOADSY	/NO, CHECK FOR SYS FILE LOADING COMMAND.
593		00646 R	100667 R	LAC	KLCOMP	/YES.
594		00647 R	000764 R	DAC	TV/CNT	
595		00650 R	001135 R	LAC*	KLCOMP	/GET PROCESSING ROUTINE ADDRESS
596		00651 R	607367 R	DAC	KLCOMP	
597		00652 R	207700 R	LAC	STOPER	/BATCH ON?
598		00653 R	047717 R	SPA		/NO.
599		00654 R	227700 R	JMP	.+2	/YES.
600		00655 R	047700 R	JMP*	KLCOMP	
601	B	00656 R	217777 A	LAC	KLCOMP	/ TEST FOR LEGAL COMMAND.
602		00657 R	741100 A	RAL		
603		00660 R	600662 R	SPA		
604		00661 R	627700 R	JMP	KLBBM	
605		00662 R	207700 R	JMP*	KLCOMP	
606		00663 R	740010 A			
607		00664 R	741100 A			
608		00665 R	600367 R			
609		00666 R	627700 R			
610				.EJECT		

```

611 /
612 /TABLE SEARCH SUBROUTINE
613 / JMS KLTABLE
614 / TAB1 /ADDRESS OF TABLE OF COMMANDS
615 / TAB2 /ADDRESS OF DISPATCH ADDRESS (&SIZE)
616 / (RETURN) /BAD COMMAND
617 / (RETURN) /GOOD COMMAND
618 /
619 00667 R 000000 A KLTABLE 0
620 00670 R 220667 R LAC* KLTABLE /GET COMMAND ADDRESS
621 00671 R 440667 R ISZ KLTABLE /BUMP TO NEXT ARG
622 00672 R 047715 R DAC KLDIRF /SAVE IN SIXBT UNPACK
623 00673 R 220667 R LAC* KLTABLE /GET DISPATCH ADDRESS
624 00674 R 440667 R ISZ KLTABLE /BUMP TO RETURN
625 00675 R 047700 R DAC KLCOMP /SAVE
626 00676 R 227700 R LAC* KLCOMP /GET TABLE SIZE
627 00677 R 447700 R ISZ KLCOMP
628 00700 R 047723 R DAC KLCNTT /SAVE SIZE FOR # OF ENTRIES
629 00701 R 047732 R DAC SINGOK /ACCEPT SINGLE LETTER COMMANDS
630 00702 R 147724 R DZM KLPOS /CLEAR POSITION INDICATOR
631 B 00703 R 211567 R NEXTCM LAC (KLCOM2 /INITIALIZE PACK
632 00704 R 047703 R DAC KLPUTP
633 00705 R 147711 R DZM KL57
634 00706 R 147722 R DZM SIXROS /DON'T MAKE RO INTO SPACE
635 B 00707 R 150013 R DZM KLCOM2 /CLEAR SECONDARY COMMAND STORAGE
636 B 00710 R 150014 R DZM KLCOM2+1
637 B 00711 R 150015 R DZM KLCOM2+2
638 B 00712 R 150016 R DZM KLCOM2+3
639 00713 R 777777 A LAW -1 /INITIALIZE UNPACK
640 00714 R 047677 R DAC KLCNT
641 00715 R 102005 R NXTCHR JMS KLFSIX /GET CHARACTER
642 00716 R 741200 A SNA
643 00717 R 600722 R JMP PCKDON /ALL DONE PACKING
644 00720 R 101714 R JMS KLPUT /PACK INTO KLCOM2
645 00721 R 600715 R JMP NXTCHR
646 B 00722 R 210007 R PCKDON LAC KLCOM
647 B 00723 R 550013 R SAD KLCOM2 /TEST WD 1
648 00724 R 741000 A SKP
649 00725 R 600741 R JMP NSAME
650 B 00726 R 210010 R LAC KLCOM+1
651 B 00727 R 550014 R SAD KLCOM2+1 /TEST WD2
652 00730 R 741000 A SKP
653 00731 R 600741 R JMP NSAME
654 B 00732 R 210011 R LAC KLCOM+2
655 B 00733 R 550015 R SAD KLCOM2+2 /TEST WD3
656 00734 R 741000 A SKP
657 00735 R 600741 R JMP NSAME
658 B 00736 R 210012 R LAC KLCOM+3
659 B 00737 R 550016 R SAD KLCOM2+3 /TEST WD4
660 00740 R 600756 R JMP SAME /GOOD MATCH
661 00741 R 207732 R NSAME LAC SINGOK
662 00742 R 741200 A SNA

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663		00743 R 600752 R	JMP NXNSAM	/NO SINGLE LETTER COMMANDS
664	B	00744 R 210013 R	LAC KLCOM2	
665	B	00745 R 511570 R	AND (774000	/GET 1ST CHAR
666		00746 R 741200 A	SNA	
667		00747 R 147732 R	DZM SINGOK	/SET FOR FULL WORD COMMANDS
668	B	00750 R 550007 R	SAD KLCOM	
669		00751 R 600756 R	JMP SAME	/GOOD MATCH
670		00752 R 447724 R	NXNSAM ISZ KLPOS	
671		00753 R 447723 R	ISZ KLCNTT	/SKIP IF NO MORE COMMANDS
672		00754 R 600703 R	JMP NEXTCM	/TRY NEXT COMMAND
673		00755 R 620667 R	JMP* KLTABL	/EXIT-BAD
674		00756 R 207700 R	SAME LAC KLCOMP	
675		00757 R 347724 R	TAD KLPOS	
676		00760 R 047700 R	DAC KLCOMP	
677		00761 R 440667 R	ISZ KLTABL	/BUMP TO GOOD EXIT
678		00762 R 227700 R	LAC* KLCOMP	/DISPATCH ADR IN AC
679		00763 R 620667 R	JMP* KLTABL	/EXIT-GOOD

.TITLE X/M/DOS NRM COMMAND TABLE  
 /COMMAND TABLE  
 /NOTE: EACH COMMAND TERMINATED BY NULL  
 FULCMD .SIXBT /LOG@/ / KLLOG  
 .SIXBT /LOGW@/ / KLLOGW  
 .SIXBT /SCOM@/ / KLSCOM  
 .SIXBT /INSTRUCT@/  
 .SIXBT /REQUEST@/  
 .SIXBT /ASSIGN@/  
 .SIXBT /PROTECT@/ / KLPRO  
 .SIXBT /KEEP@/ / KLKEEP  
 .SIXBT /DATE@/ / KLDATE  
 .SIXBT /TIME@/ / KLTIME  
 .SIXBT /QDUMP@/  
 .SIXBT /HALT@/  
 .SIXBT /GET@/ / KLCGET  
 .SIXBT /LOGIN@/ / KLNLIN  
 .SIXBT /GETP@/ / KLCGTP  
 .SIXBT /GETT@/ / KLGETT  
 .SIXBT /GETS@/ / KLGETS  
 .SIXBT /PUT@/ / KLGPOT  
 .SIXBT /LOGOUT@/ / KLNLOT  
 .SIXBT /M@/ / KLWHAT  
 .SIXBT /MICLOG@/ / KLNMIC  
 .SIXBT /HALF@/ / KLHALF

680 00764 R 141707 A  
 681 00765 R 000000 A  
 682 00766 R 141707 A  
 683 00767 R 270000 A  
 684 00770 R 230317 A  
 685 00771 R 150000 A  
 686 00772 R 111623 A  
 00773 R 242225 A  
 00774 R 032400 A  
 687 00775 R 220521 A  
 00776 R 250523 A  
 00777 R 240000 A  
 688 01000 R 012323 A  
 01001 R 110716 A  
 01002 R 000000 A  
 689 01003 R 202217 A  
 01004 R 240503 A  
 01005 R 240000 A  
 690 01006 R 130505 A  
 01007 R 200000 A  
 691 01010 R 040124 A  
 01011 R 050000 A  
 692 01012 R 241115 A  
 01013 R 050000 A  
 693 01014 R 210425 A  
 01015 R 152000 A  
 694 01016 R 100114 A  
 01017 R 240000 A  
 695 01020 R 070524 A  
 01021 R 000000 A  
 696 01022 R 141707 A  
 01023 R 111600 A  
 697 01024 R 070524 A  
 01025 R 200000 A  
 698 01026 R 070524 A  
 01027 R 240000 A  
 699 01030 R 070524 A  
 01031 R 230000 A  
 700 01032 R 202524 A  
 01033 R 000000 A  
 701 01034 R 141707 A  
 01035 R 172524 A  
 01036 R 000000 A  
 702 01037 R 150000 A  
 703 01040 R 151103 A  
 01041 R 141707 A  
 01042 R 000000 A  
 704 01043 R 100114 A  
 01044 R 060000 A

PAGE	19	DOSNRM 100	X/M/DOS NRM	COMMAND	TABLE
705	01045 R 041723 A		.SIXBT	/DOS150/	
706	01046 R 616500 A	LQFILE	.SIXBT	/QFILE0/	
	01047 R 210611 A				
	01050 R 140500 A				
707	01051 R 260000 A		.SIXBT	/V0/	
708	01052 R 262400 A		.SIXBT	/VT0/	
709	01053 R 630000 A		.SIXBT	/30/	
710	01054 R 240102 A		.SIXBT	/TAB0/	/KL33TY (BR-080)
	01055 R 000000 A				
711	01056 R 061114 A		.SIXBT	/FILL0/	/KLLA30 (BR-080)
	01057 R 140000 A				
712	01060 R 142000 A		.SIXBT	/LP0/	/ KLLP
713	01061 R 012011 A		.SIXBT	/API0/	
	01062 R 000000 A				
714	01063 R 020124 A		.SIXBT	/BATCH0/	
	01064 R 031000 A				
715	01065 R 201714 A		.SIXBT	/POLLER0/	
	01066 R 140522 A				
	01067 R 000000 A				
716	01070 R 021723 A	LBOSS	.SIXBT	/BOSS0/	
	01071 R 230000 A				
717	01072 R 020116 A		.SIXBT	/BANK0/	/ KLBANK
	01073 R 130000 A				
718	01074 R 200107 A		.SIXBT	/PAGE0/	/ KLPAE
	01075 R 050000 A				
719	01076 R 022506 A		.SIXBT	/BUFFS0/	/ KLNBUF
	01077 R 062300 A				
720	01100 R 031001 A		.SIXBT	/CHANNEL0/	
	01101 R 161605 A				
	01102 R 140000 A				
721	01103 R 241115 A		.SIXBT	/TIMEST0/	
	01104 R 052324 A				
	01105 R 000000 A				
722	01106 R 053005 A	EXECUT	.SIXBT	/EXECUTE0/	/ KLEXEC
	01107 R 032524 A				
	01110 R 050000 A				
723	01111 R 000000 A		.SIXBT	/0/	/ KLOK
724	01112 R 141701 A	LOAD	.SIXBT	/LOAD0/	/ KLLOA
	01113 R 040000 A				
725	01114 R 071417 A	GLOAD	.SIXBT	/GLOAD0/	/ KLGLO
	01115 R 010400 A				
726	01116 R 040424 A	DDT	.SIXBT	/DDT0/	/ KLDDT
	01117 R 000000 A				
727	01120 R 040424 A		.SIXBT	/DDTNS0/	/ KLDDTN
	01121 R 162300 A				
728	01122 R 302615 A		.SIXBT	/X/M0/	/KLX/M (BR-080)
	01123 R 000000 A				
729	01124 R 250361 A		.SIXBT	/UC150/	/KLUC15 (BR-080)
	01125 R 650000 A				
730	01126 R 150515 A		.SIXBT	/MEMSIZ0/	/KLMSIZ (BR-080)
	01127 R 231132 A				
	01130 R 000000 A				

731	01131 R 151704 A	.SIXBT	MODE0/	/KLMODE (BR-082)
732	01132 R 050000 A			
	01133 R 441217 A	.SIXBT	/SJOB0/	/(RKB-105) (IGNORED)
	01134 R 020000 A			
733		.EJECT		



734			/DISPATCH TABLE FOR NORMAL COMMANDS		
735			/ +200000 MEANS ILLEGAL IN BATCH MODE		
736			/ +400000 MEANS \$JOB		
737			/		
738	01135	R 777716	A CMDISP	CMDISE-CMDISP\777777+2	
739	01136	R 002037	R	KLLOG	
740	01137	R 002116	R	KLLOGW	
741	01140	R 003646	R	KLSCOM	
742	01141	R 003613	R	KLINS	
743	01142	R 002154	R	KLREQ	
744	01143	R 006307	R	KLASI	
745	01144	R 005077	R	KLPRO	
746	01145	R 005062	R	KLKEEP	
747	01146	R 004445	R	KLDATE	
748	01147	R 004667	R	KLTIME	
749	01150	R 202130	R	KLTDU+200000	
750	01151	R 202144	R	KLHALT+200000	
751	01152	R 206205	R	KLCGET+200000	
752	01153	R 006713	R	KLNLIN	
753	01154	R 206207	R	KLCGTP+200000	
754	01155	R 206211	R	KLGETT+200000	
755	01156	R 206213	R	KLGETS+200000	
756	01157	R 206254	R	KLGPOT+200000	
757	01160	R 006660	R	KLNLOT	
758	01161	R 000342	R	KLWHAT	
759	01162	R 006732	R	KLNMIC	
760	01163	R 005643	R	KLHALF	
761	01164	R 000342	R	KLWHAT	
762	01165	R 000342	R	KLWHAT	
763	01166	R 000342	R	KLWHAT	
764	01167	R 005177	R	KLVT	
765	01170	R 000342	R	KLWHAT	
766	01171	R 005135	R	KL33TY	
767	01172	R 005150	R	KLLA30	
768	01173	R 005653	R	KLLP	
769	01174	R 005163	R	KLAPI	/(RKB-105) REMOVED 'ILL IN BATCH' BIT
770	01175	R 005706	R	KLBAT	/(RKB-105) //
771	01176	R 005310	R	KLPLR	/(RKB-105) //
772	01177	R 007272	R	BOSS15	
773	01200	R 005672	R	KLBank	
774	01201	R 005667	R	KLPage	
775	01202	R 006625	R	KLNBUF	
776	01203	R 006130	R	KL7OR9	
777	01204	R 005015	R	TIIMLIM	
778	01205	R 007262	R	PLOADC KLEXEC	
779	01206	R 000320	R	KLOK	
780	01207	R 207257	R	KLLOA+200000	
781	01210	R 007257	R	KLGL0	
782	01211	R 207257	R	KLDDT+200000	
783	01212	R 207257	R	KLDDTN+200000	
784	01213	R 005207	R	KLX/M	/X/M ON/OFF (BR-080)
785	01214	R 005222	R	KLUC15	/UC15 ON/OFF (BR-080)

786	01215 R 005235 R	KLMSIZ	/MEMSIZ NNN (BR-080)
787	01216 R 005324 R	KLMODE	/MODE (BR-082)
788	01217 R 400256 R	KLOK1+400000	/(RKB-105) \$JOB
789	001220 R	CMDISE=.	

## MONITOR PRINT-OUT BUFFERS

/ EAG: 101

✓EAG:101

01273 R 551232 A  
 01274 R 201350 A  
 01275 R 440650 A  
 01276 R 202471 A  
 01277 R 447650 A  
 01300 R 064000 A  
 01301 R 000000 A

806

HDR  
 377002  
 000000

807

01302 R 377002 A \*G  
 01303 R 000000 A \*G  
 01304 R 202131 A KLBUF8 .ASCII ' ENTER DATE (MM/DD/YY) - '<175>  
 01305 R 652212 A  
 01306 R 511010 A  
 01307 R 440650 A  
 01310 R 425005 A  
 01311 R 046632 A  
 01312 R 276110 A  
 01313 R 427662 A  
 01314 R 545224 A  
 01315 R 026500 A  
 01316 R 764000 A  
 01317 R 000000 A

808

HDR  
 377002  
 000000

809

01320 R 377002 A \*G  
 01321 R 000000 A \*G  
 01322 R 202050 A KLBUFA .ASCII ' BAD UNIT - IGNORED FROM ERR'<15>  
 01323 R 142100 A  
 01324 R 526351 A  
 01325 R 152100 A  
 01326 R 265011 A  
 01327 R 143634 A  
 01330 R 476450 A  
 01331 R 542100 A  
 01332 R 432451 A  
 01333 R 746500 A  
 01334 R 426452 A  
 01335 R 206400 A

810

HDR  
 377002  
 000000

811

01336 R 377002 A \*G  
 01337 R 000000 A \*G  
 01340 R 201004 A KLBUFD .ASCII ' '<175>  
 01341 R 020100 A  
 01342 R 764000 A  
 01343 R 000000 A

812

HDR  
 377002  
 000000

813

01344 R 377002 A \*G  
 01345 R 000000 A \*G  
 01346 R 202050 A KLBUFG .ASCII ' BAD BATCH DEL'<15>  
 01347 R 142100 A  
 01350 R 412032 A  
 01351 R 441620 A  
 01352 R 202110 A

814	01353 R 553032 A				
	01354 R 377002 A *G		HDR		
	01355 R 000000 A *G		377002		
815	01356 R 202050 A	KLBUFH	.ASCII	' BAD COMMAND IN BATCH MODE'<15>	
	01357 R 142100 A				
	01360 R 416371 A				
	01361 R 546602 A				
	01362 R 472104 A				
	01363 R 044634 A				
	01364 R 202050 A				
	01365 R 152206 A				
	01366 R 441011 A				
	01367 R 547610 A				
	01370 R 424320 A				
	01371 R 000000 A				
816			HDR		
	01372 R 377002 A *G		377002		
	01373 R 000000 A *G		000000		
817	01374 R 202050 A	FETER	.ASCII	' BAD UIC'<15>	
	01375 R 142100 A				
	01376 R 526230 A				
	01377 R 306400 A				
818			HDR		
	01400 R 377002 A *G		377002		
	01401 R 000000 A *G		000000		
819	01402 R 202151 A	GETERR	.ASCII	' FILE NAME MISSING'<15>	/(BR-094)
	01403 R 146212 A				
	01404 R 202350 A				
	01405 R 146612 A				
	01406 R 202331 A				
	01407 R 151646 A				
	01410 R 446350 A				
	01411 R 706400 A				
820			HDR		
	01412 R 377002 A *G		377002		
	01413 R 000000 A *G		000000		
821	01414 R 446311 A	CODERR	.ASCII	' ILLEGAL PROTECTION CODE'<15>	
	01415 R 442616 A				
	01416 R 406304 A				
	01417 R 050244 A				
	01420 R 476510 A				
	01421 R 541650 A				
	01422 R 446371 A				
	01423 R 620206 A				
	01424 R 476110 A				
	01425 R 506400 A				
822			HDR		
	01426 R 377002 A *G		377002		
	01427 R 000000 A *G		000000		
823	01430 R 212371 A	ONFERR	.ASCII	' "ON" OR "OFF" NOT TYPED'<15>	
	01431 R 621100 A				

01432 R 476444 A  
 01433 R 021236 A  
 01434 R 432144 A  
 01435 R 220234 A  
 01436 R 476504 A  
 01437 R 052262 A  
 01440 R 502130 A  
 01441 R 406400 A

824 HDR  
 01442 R 377002 A \*G 377002  
 01443 R 000000 A \*G 000000  
 825 INSR .ASCII 'ILLEGAL \$INSTRUCT COMMAND'<15>

01444 R 446311 A  
 01445 R 442616 A  
 01446 R 406304 A  
 01447 R 022222 A  
 01450 R 472472 A  
 01451 R 451252 A  
 01452 R 416504 A  
 01453 R 041636 A  
 01454 R 466330 A  
 01455 R 147210 A  
 01456 R 064000 A  
 01457 R 000000 A

826 HDR  
 01460 R 377002 A \*G 377002  
 01461 R 000000 A \*G 000000  
 827 DIGERR .ASCII 'NON-NUMERIC CHARACTER IN ARGUMENT'<15>

01462 R 472371 A  
 01463 R 626634 A  
 01464 R 526330 A  
 01465 R 551222 A  
 01466 R 415010 A  
 01467 R 344202 A  
 01470 R 512030 A  
 01471 R 352212 A  
 01472 R 511011 A  
 01473 R 147100 A  
 01474 R 406450 A  
 01475 R 752632 A  
 01476 R 426352 A  
 01477 R 406400 A

828 HDR  
 01500 R 377002 A \*G 377002  
 01501 R 000000 A \*G 000000  
 829 DATERR .ASCII 'BAD DATE - IGNORED'<15>

01502 R 412030 A  
 01503 R 420210 A  
 01504 R 406510 A  
 01505 R 520132 A  
 01506 R 202230 A  
 01507 R 747236 A  
 01510 R 512130 A  
 01511 R 406400 A

830 HDR

	01512	R	377002	A	*G	377002	
	01513	R	000000	A	*G	000000	
831	01514	R	412030	A		TIMERR	.ASCII 'BAD TIME - IGNORED'<15>
	01515	R	420250	A			
	01516	R	446330	A			
	01517	R	520132	A			
	01520	R	202230	A			
	01521	R	747236	A			
	01522	R	512130	A			
	01523	R	406400	A			
832						HDR	
	01524	R	377002	A	*G	377002	
	01525	R	000000	A	*G	000000	
833	01526	R	446311	A		LIMERR	.ASCII 'ILLEGAL TIME LIMIT SPECIFIED - 1 MIN. ASSUMED'<15>
	01527	R	442616	A			
	01530	R	406304	A			
	01531	R	052222	A			
	01532	R	466124	A			
	01533	R	046222	A			
	01534	R	466232	A			
	01535	R	420246	A			
	01536	R	502130	A			
	01537	R	344614	A			
	01540	R	446130	A			
	01541	R	420132	A			
	01542	R	201424	A			
	01543	R	046622	A			
	01544	R	471344	A			
	01545	R	040646	A			
	01546	R	516531	A			
	01547	R	542610	A			
	01550	R	064000	A			
	01551	R	000000	A			
834						HDR	
	01552	R	377002	A	*G	377002	
	01553	R	000000	A	*G	000000	
835	01554	R	060320	A		FORMFD	.ASCII <14><15>
	01555	R	000000	A			
836						HDR	
	01556	R	377002	A	*G	377002	
	01557	R	000000	A	*G	000000	
837	01560	R	446311	A		CHNERR	.ASCII 'ILLEGAL CHANNEL SPECIFICATION'<15>
	01561	R	442616	A			
	01562	R	406304	A			
	01563	R	041620	A			
	01564	R	406351	A			
	01565	R	642630	A			
	01566	R	202472	A			
	01567	R	042606	A			
	01570	R	446151	A			
	01571	R	141602	A			
	01572	R	522231	A			

838	01573 R 747032 A			
	01574 R 377002 A *G		HDR	
	01575 R 000000 A *G		377002	
839	01576 R 472371 A	HNOERR	.ASCII	'NON-EXISTANT HANDLER NUMBER'<15>
	01577 R 626612 A			
	01600 R 542232 A			
	01601 R 352202 A			
	01602 R 472504 A			
	01603 R 044202 A			
	01604 R 472111 A			
	01605 R 442644 A			
	01606 R 202352 A			
	01607 R 546604 A			
	01610 R 426441 A			
	01611 R 500000 A			
840			HDR	
	01612 R 377002 A *G		377002	
	01613 R 000000 A *G		000000	
841	01614 R 516632 A	BOSERR	.ASCII	'SYSTEM NOT CONFIGURED FOR BOSS X/M MODE'<15>
	01615 R 352212 A			
	01616 R 465011 A			
	01617 R 647650 A			
	01620 R 202071 A			
	01621 R 747214 A			
	01622 R 446172 A			
	01623 R 551212 A			
	01624 R 421010 A			
	01625 R 647644 A			
	01626 R 202051 A			
	01627 R 751646 A			
	01630 R 202612 A			
	01631 R 646500 A			
	01632 R 466370 A			
	01633 R 442432 A			
842			HDR	
	01634 R 377002 A *G		377002	
	01635 R 000000 A *G		000000	
843	01636 R 446311 A	UNTERR	.ASCII	'ILLEGAL UNIT NUMBER'<15>
	01637 R 442616 A			
	01640 R 406304 A			
	01641 R 052634 A			
	01642 R 446504 A			
	01643 R 047252 A			
	01644 R 466050 A			
	01645 R 551032 A			
844			HDR	
	01646 R 377002 A *G		377002	
	01647 R 000000 A *G		000000	
845	01650 R 412030 A	BADMSZ	.ASCII	'BAD MEMORY SIZE - IGNORED'<15>
	01651 R 420232 A			
	01652 R 426331 A			



01653 R 751262 A  
01654 R 202471 A  
01655 R 155212 A  
01656 R 201324 A  
01657 R 044616 A  
01660 R 472372 A  
01661 R 242610 A  
01662 R 064000 A  
01663 R 000000 A

.TITLE XMM/DOS NRM 5/7 ASCII UNPACKING ROUTINE

/IOPS 5/7 ASCII UNPACKING ROUTINE

/INITIALIZE:

/ KLGET5 TO LAW -1

/ KLGETP TO BUFFER ADDRESS+2

/

KLGET 0

ISZ KLGET5

JMP KL5GET /WORD PAIR STARTED

LAC\* KLGETP /NEED NEXT PAIR

ISZ KLGETP

DAC KLWD1 /FIRST PART

LAC\* KLGETP

ISZ KLGETP

DAC KLWD2 /LAST PART

LAW 17773 /RESET CHAR COUNT

DAC KLGET5

LAW 17770 /SHIFT LOOP 7+1/2 TIMES

KL5GET DAC KLWD3

KL6GET LAC KLWD2

RAL

ISZ KLWD3

JMP .+3

AND (177 /GOT CHARACTER

JMP\* KLGET /EXIT

DAC KLWD2

LAC KLWD1

RAL

DAC KLWD1

JMP KL6GET /BACK TO LOOP

846  
847  
848  
849  
850  
851  
852 01664 R 000000 A  
853 01665 R 447702 R  
854 01666 R 601677 R  
855 01667 R 227701 R  
856 01670 R 447701 R  
857 01671 R 047706 R  
858 01672 R 227701 R  
859 01673 R 447701 R  
860 01674 R 047707 R  
861 01675 R 777773 A  
862 01676 R 047702 R  
863 01677 R 777770 A  
864 01700 R 047710 R  
865 01701 R 207707 R  
866 01702 R 740010 A  
867 01703 R 447710 R  
868 01704 R 601707 R  
869 B 01705 R 511571 R  
870 01706 R 621664 R  
871 01707 R 047707 R  
872 01710 R 207706 R  
873 01711 R 740010 A  
874 01712 R 047706 R  
875 01713 R 601701 R

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876 .TITLE XVM/DOS NRM 5/7 ASCII PACKING ROUTINE
877 /IOPS 5/7 ASCII PACKING ROUTINE
878 /INITIALIZE:
879 / KL57 TO ZERO
880 / KLPUTP TO BUFFER ADDRESS+2
881 /
882 01714 R 000000 A KLPUT 0
883 B 01715 R 511571 R AND (177
884 01716 R 047676 R DAC KLCHR2
885 01717 R 744000 A CLL
886 01720 R 207711 R LAC KL57 /CHAR POSITION
887 B 01721 R 351572 R TAD (JMP* KLJ57
888 01722 R 041724 R DAC .+2
889 01723 R 207676 R LAC KLCHR2
890 01724 R 740040 A XX /MODIFIED JMP
891 01725 R 001732 R KLJ57 KL571 /CHAR1
892 01726 R 001736 R KL572 /CHAR2
893 01727 R 001741 R KL573 /CHAR3
894 01730 R 001754 R KL574 /CHAR4
895 01731 R 001757 R KL575 /CHAR5
896 01732 R 742020 A KL571 RTR /8 RIGHT
897 01733 R 107754 R JMS RSHFT6
898 01734 R 167703 R KL571A DZM* KLPUTP /CLEAR DATA WORD
899 01735 R 601762 R JMP KLND57
900 01736 R 742010 A KL572 RTL /4 LEFT
901 01737 R 742010 A RTL
902 01740 R 601762 R JMP KLND57
903 01741 R 742020 A KL573 RTR /3 RIGHT-1ST HALF
904 01742 R 740020 A RAR
905 B 01743 R 511562 R AND (17
906 01744 R 267703 R XOR* KLPUTP
907 01745 R 067703 R DAC* KLPUTP
908 01746 R 447703 R ISZ KLPUTP /LAST WORD OF PAIR
909 01747 R 207676 R LAC KLCHR2 /2ND HALF
910 01750 R 742020 A RTR /4 RIGHT
911 01751 R 742020 A RTR
912 B 01752 R 511573 R AND (700000
913 01753 R 601734 R JMP KL571A
914 01754 R 742010 A KL574 RTL /8 LEFT
915 01755 R 107747 R JMS LSHFT6
916 01756 R 601762 R JMP KLND57
917 01757 R 740010 A KL575 RAL /1 LEFT
918 01760 R 147711 R DZM KL57 /RESET 5/7 COUNTER
919 01761 R 741000 A SKP
920 01762 R 447711 R KLND57 ISZ KL57
921 01763 R 267703 R XOR* KLPUTP
922 01764 R 067703 R DAC* KLPUTP
923 01765 R 207711 R LAC KL57
924 01766 R 741200 A SNA
925 01767 R 447703 R ISZ KLPUTP /2ND WORD COMPLETE
926 01770 R 207676 R LAC KLCHR2
927 01771 R 621714 R JMP* KLPUT /EXIT

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928      .TITLE XLM/DOS NRM      5/7 ASCII PACK INTO BUFFER ROUTINE
929      /
930      /      THIS ROUTINE TAKE 5/7 ASCII AND PACKS IT INTO A BUFFER
931      /      IN 5/7 ASCII
932      /
933      /      SET UP BEFORE FIRST CALL : DZM KL57
934      /      LAC (BUFFER+2
935      /      DAC KLPUTP
936      /      FORMAT OF EACH CALL      JMS      STUFF
937      /      TEXTPOINTER
938      /
939      /      NOTE: ALL TEXT STRINGS SHOULD END IN <0>
940      /
941      /
942      /      THIS ROUTINE USES KLPUT AND KLGET !
943      /
944      01772 R 000000 A      STUFF      0      /ENTRY TO MOVE 5/7 ASCII MESSAGES INTO ONE
945      /BUFFER ROUTINE (BR-093)
946      01773 R 777777 A      LAW      -1      /SET UP KLGET 5/7 UNPACK ROUTINE (BR-093)
947      01774 R 047702 R      DAC      KLGET5      /"*****" (BR-093)
948      01775 R 221772 R      LAC*     STUFF      /POINTER TO 5/7 TEXT (BR-093)
949      01776 R 047701 R      DAC      KLGETP      /SET UP KLGET (BR-093)
950      01777 R 441772 R      ISZ      STUFF      /POINT TO EXIT (BR-093)
951      02000 R 101664 R      STUFF1    JMS      KLGET      /GET A CHAR (BR-093)
952      02001 R 741200 A      SNA      /SKIP IF NOT A NULL (BR-093)
953      02002 R 621772 R      JMP*     STUFF      /A NULL - QUIT (BR-093)
954      02003 R 101714 R      JMS      KLPUT      /STUFF IT IN BUFFER (BR-093)
955      02004 R 602000 R      JMP      STUFF1      /GET NEXT CHAR (BR-093)

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956 .TITLE X/M/DOS NRM .SIXBT UNPACKING ROUTINE
957 02005 R 000000 A KLFSIX 0 /FROM SIXBIT
958 02006 R 447677 R ISZ KLCNT
959 02007 R 602015 R JMP KLFSXT
960 02010 R 227715 R LAC* KLDIRF
961 02011 R 447715 R ISZ KLDIRF
962 02012 R 047717 R DAC TVCNT
963 02013 R 777775 A LAW -3
964 02014 R 047677 R DAC KLCNT /SETUP 3 CHAR CT.
965 02015 R 207717 R KLFSXT LAC TVCNT
966 02016 R 107747 R JMS LSHFT6
967 02017 R 047717 R DAC TVCNT
968 02020 R 740010 A RAL
969 B 02021 R 511574 R AND (77
970 02022 R 740200 A SZA
971 02023 R 602027 R JMP SIXOK
972 02024 R 207722 R LAC SIXROS
973 02025 R 750200 A SZA|CLA
974 B 02026 R 211575 R LAC (40
975 02027 R 047716 R SIXOK DAC KLCNTB /SAVE
976 B 02030 R 511575 R AND (40
977 02031 R 745202 A SNA|CLL|CML
978 02032 R 744000 A CLL
979 02033 R 207716 R LAC KLCNTB
980 02034 R 740600 A SNL|SZA /NO BIT 7
981 B 02035 R 251520 R XOR (100
982 02036 R 622005 R JMP* KLFSIX /EXIT

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983 .TITLE X/M/DOS NRM $LOG, $LOGW
984 /$LOG COMMAND ROUTINE
985 / IN LOG MODE UNTIL
986 / ALT MODE ENCOUNTERED IN
987 / COMMAND STRING
988
989 02037 R 142113 R DZM LOGWF /CLEAR LOG-WAIT FLAG
990 02040 R 602061 R JMP LOG1
991
992 02041 R 202113 R LOGEND=. LAC LOGWF / WAS COMMAND LOG AND WAIT?
993 02042 R 741200 A SNA /YES, TYPE BELLS TP WAKE UP OPERATOR.
994 02043 R 600320 R JMP KLOK /NO.
995 02044 R 105006 R JMS BOSTTY
996 02045 R 100440 R JMS TYPE
997 02046 R 002052 R BELLS-2
998 02047 R 105006 R JMS BOSTTY
999 02050 R 100440 R JMS TYPE
1000 02051 R 002055 R UPAROP-2
1001 02052 R 602052 R JMP
1002 02053 R 600320 R JMP KLOK
1003 02054 R 014240 A BELLS .ASCII <3><12><7><7><7><7><15>
02055 R 703416 A
02056 R 034320 A
02057 R 000000 A
1004 02057 R
1005 02057 R 014253 A UPAROP .LOC .-1
02060 R 650032 A .ASCII <3><12>' ^P' <15>
02061 R 002061 R
1006 LOG1=.
1007 /IF IN BOSS X/M MODE ECHO LINE ON TTY
1008 B 02061 R 231531 R LAC* (152 /BOSS X/M?
1009 02062 R 740100 A SMA /YES
1010 02063 R 602070 R JMP LOG2 /NO
1011 02064 R 105006 R JMS BOSTTY
1012 02065 R 100440 R JMS TYPE
1013 02066 R 010017 R KLBUFF
1014 02067 R 602041 R JMP LOGEND
1015 LOG2=.
1016 02070 R 101664 R JMS KLGET /GET CHAR
1017 B 02071 R 551576 R SAD (175
1018 02072 R 602041 R JMP LOGEND /ALT MODE
1019 B 02073 R 551577 R SAD (15
1020 02074 R 602076 R JMP KLCRR /CARRIAGE RETURN
1021 02075 R 602070 R JMP LOG2 /NEXT CHAR
1022 02076 R 002076 R
1023 02076 R 100440 R KLCRR=. JMS TYPE /OUTPUT 5 SPACES
1024 02077 R 001336 R KLBUFD-2
1025 02100 R 002776 A CAL+2776 /GET NEXT PART OF COMMAND
1026 02101 R 000010 A 10
1027 02102 R 010017 R KLBUFF
1028 02103 R 777660 A -120
1029 02104 R 000776 A CAL+776 /WAIT
1030 02105 R 000012 A 12

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PAGE	35	DOSNRM 109	X/M/DOS NRM \$LOG, \$LOGW		
1031	B	02106 R 211534 R	LAC	(KLBUFF+2	/SET UP TO SEARCH BUFFER
1032		02107 R 047701 R	DAC	KLGETP	
1033		02110 R 777777 A	LAW	-1	
1034		02111 R 047702 R	DAC	KLGET5	
1035		02112 R 602061 R	JMP	LOG1	
1036		02113 R 000000 A	LOGWF	0	
1037		02114 R 000000 A	WTIME	0	
1038		02115 R 000000 A	WTIME1	0	
1039		002116 R	KLLOGW=.		
1040		02116 R 442113 R	ISZ	LOGWF	
1041	B	02117 R 231554 R	LAC*	(156	
1042	B	02120 R 171554 R	DZM*	(156	
1043		02121 R 042114 R	DAC	WTIME	
1044	B	02122 R 231531 R	LAC*	(152	
1045		02123 R 740100 A	SMA		
1046		02124 R 602127 R	JMP	+.3	
1047	B	02125 R 231553 R	LAC*	(134	/SAVE RUN TIME SO IT CAN
1048		02126 R 042115 R	DAC	WTIME1	/BE SUSPENDED DURING WAIT
1049		02127 R 602061 R	JMP	LOG1	

					.TITLE X/M/DOS NRM	\$QDUMP, \$HALT
1050					/\$QDUMP COMMAND ROUTINE	
1051					KLTDU LAC* (142	/SET TO ECHO ^Q
1052	B	02130 R	231526 R		AND (747777	
1053	B	02131 R	511600 R		XOR (020000	
1054	B	02132 R	251532 R		DAC* (142	
1055	B	02133 R	071526 R		LAC* (152	
1056	B	02134 R	231531 R		SMA	
1057		02135 R	740100 A		JMP KLOK	
1058		02136 R	600320 R		AND (773777	
1059	B	02137 R	511555 R		XOR (4000	
1060	B	02140 R	251543 R		DAC* (152	
1061	B	02141 R	071531 R		JMP KLOK	
1062		02142 R	600320 R		JMP KLOK	
1063		02143 R	600320 R			
1064					/	
1065					/\$HALT COMMAND ROUTINE	
1066			002144 R		KLHALT=.	
1067	B	02144 R	231531 R		LAC* (152	
1068		02145 R	741100 A		SPA	
1069		02146 R	600320 R		JMP KLOK	
1070	B	02147 R	231526 R		LAC* (142	
1071	B	02150 R	511600 R		AND (747777	
1072	B	02151 R	251537 R		XOR (010000	
1073	B	02152 R	071526 R		DAC* (142	
1074		02153 R	600320 R		JMP KLOK	



```

1075 .TITLE X/M/DOS NRM $REQUEST
1076 /
1077 /$REQUEST COMMAND PROCESSOR
1078 /
1079 KLREQ=.
1080 002154 R 106147 R JMS KLPGSH /WHAT KIND OF REQUEST?
1081 B 02155 R 210007 R LAC KLCOM
1082 02156 R 741200 A SNA
1083 02157 R 602167 R JMP RQALL /REQUEST ALL .DAT SLOTS
1084 02160 R 543571 R SAD USER
1085 02161 R 741000 A SKP
1086 02162 R 602425 R JMP RQPRG /REQUEST CUSP'S .DAT SLOTS
1087 B 02163 R 210010 R LAC KLCOM+1
1088 02164 R 543572 R SAD USER+1
1089 02165 R 602300 R JMP RQUSER /REQUEST POSITIVE .DAT SLOTS
1090 02166 R 602425 R JMP RQPRG /REQUEST CUSP'S .DAT SLOTS
1091 /
1092 002167 R RQALL=.
1093 02167 R 100471 R JMS PRNFST / TYPE OUT HEADER
1094 02170 R 003477 R RQHDR-2
1095 B 02171 R 211601 R LAC (RQD2BG /INITIALIZE TABLE POINTER
1096 02172 R 043541 R DAC RQD2
1097 B 02173 R 231515 R LAC* (123 /FIND .DAT -15
1098 B 02174 R 511602 R AND (77777
1099 02175 R 723763 A AAC -15
1100 02176 R 043537 R DAC RQDM15
1101 B 02177 R 231525 R LAC* (125 /FIND UIC FOR .DAT -15
1102 B 02200 R 511602 R AND (77777
1103 02201 R 723763 A AAC -15
1104 02202 R 043540 R DAC RQUM15
1105 / TYPE OUT NEGATIVE .DAT SLOT ASSIGNMENTS
1106 002203 R RQALL1=.
1107 02203 R 147711 R DZM KL57 /INITIALIZE 5/7 PACKING
1108 B 02204 R 211603 R LAC (RQLIN /ROUTINE
1109 02205 R 047703 R DAC KLPUTP
1110 02206 R 223541 R LAC* RQD2 /PACK .DAT SLOT
1111 02207 R 103456 R JMS RQPAK6
1112 02210 R 443541 R ISZ RQD2
1113 02211 R 203541 R LAC RQD2 /ARE WE DONE?
1114 B 02212 R 551604 R SAD (RQD2AL
1115 02213 R 741000 A SKP
1116 02214 R 602217 R JMP RQALL2
1117 B 02215 R 211601 R LAC (RQD2BG
1118 02216 R 043541 R DAC RQD2
1119 002217 R RQALL2=.
1120 02217 R 103452 R JMS RQTAB /PACK HT
1121 /PACK DEVICE NAME
1122 02220 R 203541 R LAC RQD2 /HANDLE .DAT SLOTS -7,-3,-2 AS
1123 B 02221 R 551605 R SAD (RQD2M7 /SPECIAL CASES.
1124 02222 R 602253 R JMP RQM7 / .DAT -7
1125 B 02223 R 551606 R SAD (RQD2M3
1126 02224 R 602256 R JMP RQM3 / .DAT -3

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1127	B	02225	R	551607	R	SAD	(RQD2M2	
1128		02226	R	602260	R	JMP	RQM2	/ .DAT -2
1129	B	02227	R	551604	R	SAD	(RQD2AL	
1130		02230	R	741000	A	SKP		
1131		02231	R	602235	R	JMP	.+4	
1132	B	02232	R	231531	R	LAC*	(152	
1133		02233	R	741100	A	SPA		
1134		02234	R	602253	R	JMP	RQM7	
1135		02235	R	223537	R	LAC*	RQDM15	/GET HANDLER NAME
1136	B	02236	R	511602	R	AND	(77777	
1137		02237	R	107467	R	JMS	FIONM	
1138		02240	R	103456	R	JMS	RQPAK6	
1139		02241	R	223537	R	LAC*	RQDM15	/UNIT NUMBER
1140		02242	R	742010	A	RTL		
1141		02243	R	742010	A	RTL		
1142	B	02244	R	511610	R	AND	(7	
1143		02245	R	741200	A	SNA		/DO NOT TYPE UNIT 0, TYPE
1144	B	02246	R	211611	R	LAC	(760	/A SPACE INSTEAD.
1145				002247	R	RQALL3=.		
1146		02247	R	723060	A	AAC	60	
1147		02250	R	101714	R	JMS	KLPUT	
1148		02251	R	443537	R	ISZ	RQDM15	
1149		02252	R	602264	R	JMP	RQALL4	
1150	B	02253	R	217104	A	RQM7	LAC	/ .SIXBT 'DKL'
1151	B	02254	R	251612	R	XOR	(14	
1152		02255	R	741000	A	SKP		
1153	B	02256	R	211613	R	RQM3	LAC	/ .SIXBT 'TTA'
1154		02257	R	741000	A	SKP		
1155	B	02260	R	211614	R	RQM2	LAC (031504)	/ .SIXBT "CMD"
1156		02261	R	103456	R	JMS	RQPAK6	/EAG:101
1157	B	02262	R	211611	R	LAC	(760	/EAG:101
1158		02263	R	602247	R	JMP	RQALL3	/UNIT 0, LEAVE BLANK.
1159						/ALL DONE FOR DEVICE		
1160						/BEGIN UIC		
1161				002264	R	RQALL4=.		
1162		02264	R	103452	R	JMS	RQTAB	/PACK HT
1163						/PACK UIC		
1164		02265	R	223540	R	LAC*	RQUM15	
1165		02266	R	103456	R	JMS	RQPAK6	
1166	B	02267	R	211577	R	LAC	(15	/PACK CARRIAGE RETURN
1167		02270	R	101714	R	JMS	KLPUT	
1168		02271	R	443540	R	ISZ	RQUM15	
1169		02272	R	100506	R	JMS	PRINT	
1170		02273	R	003507	R	RQLIN-2		
1171						/ARE WE DONE?		
1172		02274	R	203541	R	LAC	RQD2	
1173	B	02275	R	551601	R	SAD	(RQD2BG	
1174		02276	R	602302	R	JMP	RQUSR0	/YES
1175		02277	R	602203	R	JMP	RQALL1	/NO
1176						.EJECT		

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1177          002300 R      RQUSER=.
1178      02300 R 100471 R      JMS      PRNFST      /TYPE HEADER
1179      02301 R 003477 R      RQHDR-2
1180      02302 R 777777 A      RQUSR0  LAW -1      /SET UP LOC. 10 AND SWI SO THAT AFTER
1181      02303 R 347721 R      TAD SWI      / TYPING OUT POS. .DAT SLOTS WE CAN
1182      02304 R 071615 R      DAC* (10      / JMP TO CODE TO TYPE OUT SYSTEM PROGRAM
1183      /
1184      /
1185      /
1186      02305 R 207673 R      RQKLDG  LAC      DAT1      /SEE THE THREE KLUDGES BELOW
1187      02306 R 043537 R      DAC      RQDM15      /FIND .DAT +1
1188      02307 R 231525 R      LAC*      (125      /FIND UIC FOR .DAT +1
1189      02310 R 511602 R      AND      (77777
1190      02311 R 740030 A      IAC
1191      02312 R 043540 R      DAC      RQUM15
1192      02313 R 207667 R      LAC      .DATAD      /GET -(#POS. .DAT SLOTS)
1193      02314 R 043576 R      DAC      RQPOS
1194      02315 R 211616 R      LAC      (536160
1195      02316 R 071617 R      DAC*      (RQD3AL
1196      02317 R 211620 R      LAC      (RQD3BG
1197      02320 R 043557 R      DAC      RQD3
1198      /TYPE .DAT SLOT
1199      002321 R      RQUSR1=.
1200      02321 R 147711 R      DZM      KL57      /INITIALIZE 5/7 PACKING
1201      02322 R 211603 R      LAC      (RQLIN      /ROUTINE.
1202      02323 R 047703 R      DAC      KLPUTP
1203      02324 R 223557 R      LAC*      RQD3      /PACK .DAT SLOT
1204      02325 R 103456 R      JMS      RQPAK6
1205      02326 R 203557 R      LAC      RQD3      / .DAT +1 TO .DAT +??
1206      02327 R 551617 R      SAD      (RQD3AL
1207      02330 R 741000 A      SKP
1208      02331 R 602345 R      JMP      RQUSR2      /NO
1209      02332 R 463557 R      ISZ*      RQD3      /YES
1210      02333 R 223557 R      LAC*      RQD3      /UPDATE .DAT SLOT
1211      02334 R 511574 R      AND      (??
1212      02335 R 551621 R      SAD      (??
1213      02336 R 741000 A      SKP
1214      02337 R 602350 R      JMP      RQUSR4
1215      02340 R 223557 R      LAC*      RQD3
1216      02341 R 511622 R      AND      (777760
1217      02342 R 723100 A      AAC      100
1218      02343 R 063557 R      DAC*      RQD3
1219      02344 R 602350 R      JMP      RQUSR4
1220      002345 R      RQUSR2=.
1221      02345 R 443557 R      ISZ      RQD3      /UPDATE POINTER
1222      02346 R 602350 R      JMP      RQUSR4
1223      02347 R 463557 R      ISZ*      RQD3
1224      002350 R      RQUSR4=.
1225      02350 R 443576 R      ISZ      RQPOS      /ARE WE DONE?
1226      02351 R 602354 R      JMP      RQUSR5      /NO
1227      02352 R 211620 R      LAC      (RQD3BG      /YES
1228      02353 R 043557 R      DAC      RQD3

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1229          002354 R      RQU5=.
1230      02354 R 103452 R      JMS      RQTAB      /PACK HT
1231          /PACK DEVICE NAME
1232      B      02355 R 231531 R      LAC*      (152      /BOSS15 MODE?
1233          02356 R 740100 A      SMA          /YES, SKIP
1234          02357 R 602374 R      JMP      RQUSR6      /NO, NO SPECIAL CODE
1235          02360 R 223557 R      LAC*      RQD3      /POS. .DAT SLOTS 5 OR 6?
1236          02361 R 543565 R      SAD      RQD3BG+5
1237          02362 R 602371 R      JMP      RQUSR7      /YES, +5
1238          02363 R 543566 R      SAD      RQD3BG+6
1239          02364 R 741000 A      SKP          /YES, +6
1240          02365 R 602374 R      JMP      RQUSR6      /NEITHER
1241      B      02366 R 211623 R      LAC      (142040      /+6 IS ALWAYS LP IN BOSS MODE
1242          02367 R 103456 R      JMS      RQPAK6
1243          02370 R 602410 R      JMP      RQUSR8
1244      B      02371 R 211624 R      RQUSR7 LAC      (032240      /+5 IS ALWAYS CR IN BOSS MODE
1245          02372 R 103456 R      JMS      RQPAK6
1246          02373 R 602410 R      JMP      RQUSR8
1247          002374 R      RQUSR6=.
1248          02374 R 223537 R      LAC*      RQDM15      /GET HANDLER NAME
1249      B      02375 R 511602 R      AND      (77777
1250          02376 R 107467 R      JMS      FIONM
1251          02377 R 103456 R      JMS      RQPAK6
1252          02400 R 223537 R      LAC*      RQDM15      /UNIT NUMBER
1253          02401 R 742010 A      RTL
1254          02402 R 742010 A      RTL
1255      B      02403 R 511610 R      AND      (7
1256          02404 R 741200 A      SNA
1257      B      02405 R 211611 R      LAC      (760
1258          02406 R 723060 A      AAC      60
1259          02407 R 101714 R      JMS      KLPUT
1260          02410 R 443537 R      RQUSR8 ISZ      RQDM15
1261          /BEGIN UIC
1262          02411 R 103452 R      JMS      RQTAB      /PACK HT
1263          /PACK UIC
1264          02412 R 223540 R      LAC*      RQUM15
1265          02413 R 103456 R      JMS      RQPAK6
1266      B      02414 R 211577 R      LAC      (15
1267          02415 R 101714 R      JMS      KLPUT
1268          02416 R 443540 R      ISZ      RQUM15
1269          02417 R 100506 R      JMS      PRINT
1270          02420 R 003507 R      RQLIN-2
1271          /ARE WE DONE?
1272          02421 R 203557 R      LAC      RQD3
1273      B      02422 R 551620 R      SAD (RQD3BG
1274          02423 R 602474 R      JMP RQPRG3      /IF WE ARE DONE TYPING OUT THE POS. .DAT
1275          /      / SLOTS, JMP INTO THE LOOP WHICH TYPES OUT
1276          /      / OUT THE .DAT SLOTS USED BY SYSTEM PROGRAMS.
1277          /      / IF WE WERE JUST TYPING OUT THE POS. .DAT
1278          /      / BECAUSE OF AN R USER OR R ALL REQUEST, THE
1279          /      / PREVIOUS KLUDGE HAS SET THINGS UP SO THAT
1280          /      / THE LOOP WILL IMMEDIATELY EXIT TO KLOK (THE
          /      / KEYBOARD LISTENER). IF INSTEAD WE GOT HERE

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1281 / BECAUSE SOME SYSTEM PROGRAM (SUCH AS PIP)
1282 / USES ALL POS. .DAT SLOTS, THE LOOP WILL
1283 / CONTINUE AND TYPE OUT ANY OTHER .DAT SLOTS
1284 / USED BY THAT SYSTEM PROGRAM.
1285 /SEE THE PREVIOUS AND THE TWO FOLLOWING KLUDGES.
1286 02424 R 602321 R JMP RQUSR1
1287 .EJECT /NO--LOOP TO PRINT OUT MORE POSITIVE .DAT SLOTS
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1288 /REQUEST DAT SLOTS FOR A SYSTEM PROGRAM
1289 RQPRG=.
1290 B 02425 R 211625 R LAC (KLCOM /CHANGE NAME TO .SIXBT
1291 02426 R 107315 R JMS CHNSIX
1292 B 02427 R 210007 R LAC KLCOM
1293 02430 R 543603 R SAD FOCAL
1294 02431 R 602454 R JMP RQFOCL
1295 02432 R 541116 R SAD DDT /TREAT DDT,DDTNS,LOAD,GLOAD AND
1296 02433 R 602443 R JMP RQDDT /EXECUTE AS SPECIAL CASES SINCE ENTRIES
1297 02434 R 541106 R SAD EXECUT /FOR THESE PROGRAMS DO NOT EXIST IN COMBLK.
1298 02435 R 602450 R JMP RQEXEC
1299 02436 R 541112 R SAD LOAD
1300 02437 R 602443 R JMP RQLOAD
1301 02440 R 541114 R SAD GLOAD
1302 02441 R 741000 A SKP
1303 02442 R 602460 R JMP RQPRG1
1304 RQLOAD=.
1305 002443 R RQDDT=.
1306 B 02443 R 211626 R LAC (ENDLOD
1307 02444 R 047721 R DAC SWI
1308 B 02445 R 211627 R LAC (DATLOD-1
1309 B 02446 R 071615 R RQSPRG DAC* (10
1310 02447 R 602473 R JMP RQPRG3-1
1311 002450 R RQEXEC=.
1312 B 02450 R 211630 R LAC (ENDEXC
1313 02451 R 047721 R DAC SWI
1314 B 02452 R 211631 R LAC (DATEXC-1
1315 02453 R 602446 R JMP RQSPRG
1316 002454 R RQFOCL=.
1317 B 02454 R 211632 R LAC (ENDFCL
1318 02455 R 047721 R DAC SWI
1319 B 02456 R 211633 R LAC (DATFCL-1
1320 02457 R 602446 R JMP RQSPRG
1321 002460 R RQPRG1=.
1322 B 02460 R 211625 R LAC (KLCOM /IS NAME IN COMBLK?
1323 02461 R 107403 R JMS FCOMK
1324 02462 R 227402 R LAC* P2 /COMPUTE ADDRESS OF LAST .DAT
1325 02463 R 347402 R TAD P2 /ENTRY FOR THIS PROGRAM.
1326 02464 R 047721 R DAC SWI /SAVE IT IN 'SWI'.
1327 002465 R RQPRG2=.
1328 02465 R 220010 A LAC* 10 /YES, SPACE DOWN TO .DAT INFORMATION.
1329 B 02466 R 511546 R AND (770000
1330 02467 R 741200 A SNA
1331 02470 R 602473 R JMP .+3
1332 02471 R 220010 A LAC* 10
1333 02472 R 602465 R JMP RQPRG2
1334 /AT THIS POINT AIR 10 POINTS TO THE FIRST DAT SLOT
1335 02473 R 102561 R JMS RQPUSE /TYPE HEADER
1336 002474 R RQPRG3=. /THIS LOCATION GETS JUMPED TO FROM THE
1337 / /END OF THE LOOP TO PRINT OUT ALL POSITIVE
1338 / / .DAT SLOTS, IN ADDITION TO BEING JUMPED TO
1339 / /FROM BELOW AT THE END OF THIS LOOP.

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1340 /
1341 02474 R 147711 R DZM KL57 /SEE THE FOLLOWING AND THE TWO PREVIOUS KLUDGES.
1342 B 02475 R 211603 R LAC (RQLIN /INITIALIZE 5/7 PACKING ROUTINE
1343 02476 R 047703 R DAC KLPUTP
1344 02477 R 220010 A LAC* 10
1345 02500 R 043537 R DAC RQDM15 /GET DAT SLOT
1346 02501 R 042711 R DAC RQPDAT
1347 B 02502 R 231615 R LAC* (10 /FINISHED?
1348 02503 R 547721 R SAD SWI
1349 02504 R 600320 R JMP KLOK /YES, LOOK AT NEXT COMMAND.
1350 02505 R 203537 R LAC RQDM15
1351 B 02506 R 551634 R SAD (-1 /IF THIS SYSTEM PROGRAM USES ALL POS. .DAT
1352 02507 R 602305 R JMP RQKLDG / SLOTS, JMP TO THE ROUTINE WHICH PROCESSES
1353 / / THE R USER REQUEST. THAT ROUTINE WILL TYPE
1354 / / OUT THE POSITIVE .DAT SLOTS AND THEN JMP TO
1355 / / RQPRG3 ABOVE, WHICH WILL LOOK FOR ANY OTHER
1356 / / .DAT SLOTS USED BY THIS SYSTEM PROGRAM.
1357 / /SEE THE THREE PREVIOUS KLUDGES.
1358 /PACK DAT SLOT IN OUTPUT BUFFER
1359 02510 R 723015 A AAC 15
1360 B 02511 R 511574 R AND (77
1361 B 02512 R 351601 R TAD (RQD2BG
1362 02513 R 043541 R DAC RQD2
1363 02514 R 223541 R LAC* RQD2
1364 02515 R 103456 R JMS RQPAK6
1365 /PACK HT IN OUTPUT BUFFER
1366 02516 R 103452 R JMS RQTAB
1367 /PACK DEVICE IN OUTPUT BUFFER
1368 02517 R 203537 R LAC RQDM15
1369 B 02520 R 511635 R AND (700
1370 02521 R 740200 A SZA
1371 02522 R 602525 R JMP .+3
1372 02523 R 203537 R LAC RQDM15
1373 02524 R 602527 R JMP .+3
1374 02525 R 203537 R LAC RQDM15
1375 B 02526 R 251636 R XOR (777000
1376 02527 R 043537 R DAC RQDM15
1377 B 02530 R 231515 R LAC* (123
1378 B 02531 R 511602 R AND (77777
1379 02532 R 343537 R TAD RQDM15
1380 02533 R 043541 R DAC RQD2
1381 02534 R 223541 R LAC* RQD2
1382 B 02535 R 511602 R AND (77777
1383 02536 R 107467 R JMS FIONM /GET HANDLER NAME
1384 02537 R 103456 R JMS RQPAK6
1385 02540 R 223541 R LAC* RQD2 /PACK UNIT NUMBER
1386 02541 R 742010 A RTL
1387 02542 R 742010 A RTL
1388 B 02543 R 511610 R AND (7
1389 02544 R 741200 A SNA /DO NOT PRINT UNIT 0
1390 B 02545 R 211611 R LAC (760
1391 02546 R 723060 A AAC 60

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1392      02547 R 101714 R      JMS      KLPUT
1393      /PACK HT IN OUTPUT BUFFER
1394      02550 R 103452 R      JMS      RQTAB
1395      /PACK UIC IN OUTPUT BUFFER
1396      B 02551 R 231525 R      LAC*      (125
1397      B 02552 R 511602 R      AND      (77777
1398      02553 R 343537 R      TAD      RQDM15
1399      02554 R 043541 R      DAC      RQD2
1400      02555 R 223541 R      LAC*      RQD2
1401      02556 R 103456 R      JMS      RQPAK6
1402      02557 R 102633 R      JMS      RQPCLS
1403      02560 R 602474 R      JMP      RQPRG3
1404
1405      02561 R 000000 A      RQPUSE 0      /TYPE HEADER FOR 'REQUEST PROGRAM'
1406      B 02562 R 211637 R      LAC      (RQPTBL /INITIALIZE TABLE LOOK-UP
1407      02563 R 042621 R      DAC      RQPNT /RQPNT = TABLE POINTER
1408      002564 R
1409      02564 R 222621 R      RQPLP1=. LAC*      RQPNT
1410      02565 R 442621 R      ISZ      RQPNT
1411      B 02566 R 550007 R      SAD      KLCOM
1412      02567 R 602601 R      JMP      RQPSND /FIRST WORD MATCHES, LOOK AT SECOND
1413      002570 R
1414      02570 R 442621 R      RQPLP2=. ISZ      RQPNT
1415      02571 R 222621 R      LAC*      RQPNT
1416      02572 R 342621 R      TAD      RQPNT
1417      02573 R 042621 R      DAC      RQPNT
1418      02574 R 442621 R      ISZ      RQPNT
1419      02575 R 222621 R      LAC*      RQPNT
1420      02576 R 740200 A      SZA      /HAVE WE EXHAUSTED THE TABLE?
1421      02577 R 602564 R      JMP      RQPLP1 /YES, SKIP
1422      02600 R 602615 R      JMP      RQPEND /NO, LOOK AT NEXT ENTRY
1423      002601 R      RQPSND=. JMP      RQPEND /NO 'USE' MESSAGE FOR THIS PROGRAM
1424      02601 R 222621 R      LAC*      RQPNT
1425      B 02602 R 550010 R      SAD      KLCOM+1
1426      02603 R 741000 A      SKP
1427      02604 R 602570 R      JMP      RQPLP2 /FOUND A MATCH!
1428      02605 R 442621 R      ISZ      RQPNT /NO MATCH, CONTINUE LOOK-UP
1429      02606 R 222621 R      LAC*      RQPNT
1430      02607 R 042622 R      DAC      RQPFLG
1431      02610 R 202621 R      LAC      RQPNT
1432      02611 R 042712 R      DAC      RQP1
1433      02612 R 100471 R      JMS      PRNFST
1434      02613 R 002621 R      RQHDR1-2
1435      02614 R 622561 R      JMP*      RQPUSE
1436      002615 R      RQPEND=.
1437      02615 R 142622 R      DZM      RQPFLG
1438      02616 R 100471 R      JMS      PRNFST
1439      02617 R 003477 R      RQHDR-2
1440      02620 R 622561 R      JMP*      RQPUSE
1441      02621 R 000000 A      RQPNT 0
1442      02622 R 000000 A      RQPFLG 0
1443      02623 R 272110 A      RQHDR1 .ASCII ' .DAT'<11>'DEVICE'<11>'UIC'<11>'USE'<15>

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02624 R 152022 A  
 02625 R 422132 A  
 02626 R 644606 A  
 02627 R 424232 A  
 02630 R 544606 A  
 02631 R 046532 A  
 02632 R 342432 A

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B

B

B

/ RQPCLS=.

0

LAC

RQP1

DAC

RQPNT

LAC

RQPFLG

SZA

JMP

RQPMSG

LAC

(15

JMS

KLPUT

JMS

PRINT

RQLIN-2

JMP\*

RQPCLS

RQPMSG=.

LAC

(11

JMS

KLPUT

AAC

-1

DAC

RQPFLG

LAC\*

RQPNT

CLL!RAR

TCA

/TWOCMA (BR-080)

DAC

RQPUSE

ISZ

RQPNT

RQPMS1=.

LAC\*

RQPNT

SAD

RQPDAT

JMP

RQPMS2

ISZ

RQPNT

ISZ

RQPNT

ISZ

RQPUSE

JMP

RQPMS1

LAC

(15

JMS

KLPUT

RQPMS4

JMS

PRINT

RQLIN-2

JMP\*

RQPCLS

RQPMS2=.

ISZ

RQPNT

LAC\*

RQPNT

TAD

(MTABLE

/GET ADR OF OFFSET TABLE (BR-089)

DAC

TEMP

/SAVE POINTER TO OFFSET (BR-089)

LAC\*

TEMP

/GET OFFSET TO MSG TABLE (BR-089)

TAD

(MSGTAB

/COMPUTE MESSAGE POINTER (BR-089)

DAC

KLGETP

LAW

-1

1489	02703 R	047702 R	DAC	KLGET5
1490	02704 R	101664 R	RQPMS3	JMS KLGET
1491	02705 R	101714 R	JMS	KLPUT
1492	B 02706 R	551577 R	SAD	(15
1493	02707 R	602670 R	JMP	RQPMS4
1494	02710 R	602704 R	JMP	RQPMS3
1495	02711 R	000000 A	RQPDAT	0
1496	02712 R	000000 A	RQP1	0
1497			/	
1498		002713 R	RQPTBL=.	
1499	02713 R	150103 A	.SIXBT	'MACRO'
	02714 R	221700 A		
1500	02715 R	000014 A	14	
1501	02716 R	000764 A	-14&777	
1502	02717 R	000002 A	2	
1503	02720 R	000765 A	-13&777	
1504	02721 R	000003 A	3	
1505	02722 R	000766 A	-12&777	
1506	02723 R	000004 A	4	
1507	02724 R	000767 A	-11&777	
1508	02725 R	000002 A	2	
1509	02726 R	000770 A	-10&777	
1510	02727 R	000006 A	6	
1511	02730 R	000777 A	-1&777	
1512	02731 R	000023 A	23	
1513	02732 R	050411 A	.SIXBT	'EDIT'
	02733 R	240000 A		
1514	02734 R	000012 A	12	
1515	02735 R	000763 A	-15&777	
1516	02736 R	000005 A	5	
1517	02737 R	000764 A	-14&777	
1518	02740 R	000007 A	7	
1519	02741 R	000765 A	-13&777	
1520	02742 R	000024 A	24	/(GAR-109)
1521	02743 R	000766 A	-12&777	
1522	02744 R	000004 A	4	
1523	02745 R	000770 A	-10&777	
1524	02746 R	000006 A	6	
1525	02747 R	252004 A	.SIXBT	'UPDATE'
	02750 R	012405 A		
1526	02751 R	000010 A	10	
1527	02752 R	000763 A	-15&777	
1528	02753 R	000003 A	3	
1529	02754 R	000764 A	-14&777	
1530	02755 R	000002 A	2	
1531	02756 R	000766 A	-12&777	
1532	02757 R	000004 A	4	
1533	02760 R	000770 A	-10&777	
1534	02761 R	000006 A	6	
1535	02762 R	200124 A	.SIXBT	'PATCH'
	02763 R	031000 A		
1536	02764 R	000004 A	4	

PAGE	47	DOSNRM 109	X/M/DOS NRM \$REQUEST		
1537		02765 R 000764 A	-14&777		
1538		02766 R 000010 A	10		
1539		02767 R 000770 A	-10&777		
1540		02770 R 000006 A	6		
1541		02771 R 232203 A	.SIXBT 'SRCCOM'		
		02772 R 031715 A			
1542		02773 R 000006 A	6		
1543		02774 R 000763 A	-15&777		
1544		02775 R 000011 A	11		
1545		02776 R 000764 A	-14&777		
1546		02777 R 000012 A	12		
1547		03000 R 000766 A	-12&777		
1548		03001 R 000013 A	13		
1549		03002 R 066400 A	.SIXBT 'F400'		
		03003 R 000000 A			
1550		03004 R 000006 A	6		
1551		03005 R 000765 A	-13&777		
1552		03006 R 000003 A	3		
1553		03007 R 000766 A	-12&777		
1554		03010 R 000004 A	4		
1555		03011 R 000767 A	-11&777		
1556		03012 R 000002 A	2		
1557		03013 R 141701 A	.SIXBT 'LOAD'		
		03014 R 040000 A			
1558		03015 R 000006 A	6		
1559		03016 R 000773 A	-5&777		
1560		03017 R 000014 A	14		
1561		03020 R 000774 A	-4&777		
1562		03021 R 000015 A	15		
1563		03022 R 000777 A	-1&777		
1564		03023 R 000016 A	16		
1565		03024 R 031001 A	.SIXBT 'CHAIN'		
		03025 R 111600 A			
1566		03026 R 000012 A	12		
1567		03027 R 000766 A	-12&777		
1568		03030 R 000004 A	4		
1569		03031 R 000772 A	-6&777		
1570		03032 R 000003 A	3		
1571		03033 R 000773 A	-5&777		
1572		03034 R 000014 A	14		
1573		03035 R 000774 A	-4&777		
1574		03036 R 000015 A	15		
1575		03037 R 000777 A	-1&777		
1576		03040 R 000016 A	16		
1577		03041 R 053005 A	.SIXBT 'EXECUT'		
		03042 R 032524 A			
1578		03043 R 000002 A	2		
1579		03044 R 000774 A	-4&777		
1580		03045 R 000002 A	2		
1581		03046 R 071417 A	.SIXBT 'GLOAD'		
		03047 R 010400 A			
1582		03050 R 000006 A	6		

1583	03051 R 000773 A	-5&777
1584	03052 R 000014 A	14
1585	03053 R 000774 A	-4&777
1586	03054 R 000015 A	15
1587	03055 R 000777 A	-1&777
1588	03056 R 000016 A	16
1589	03057 R 011407 A	.SIXBT 'ALGOL'
	03060 R 171400 A	
1590	03061 R 000010 A	10
1591	03062 R 000763 A	-15&777
1592	03063 R 000022 A	22
1593	03064 R 000765 A	-13&777
1594	03065 R 000003 A	3
1595	03066 R 000766 A	-12&777
1596	03067 R 000004 A	4
1597	03070 R 000767 A	-11&777
1598	03071 R 000002 A	2
1599	03072 R 040424 A	.SIXBT 'DDTB'
	03073 R 000000 A	
1600	03074 R 000006 A	6
1601	03075 R 000773 A	-5&777
1602	03076 R 000014 A	14
1603	03077 R 000774 A	-4&777
1604	03100 R 000015 A	15
1605	03101 R 000777 A	-1&777
1606	03102 R 000016 A	16
1607	03103 R 040424 A	.SIXBT 'DDTNS'
	03104 R 162300 A	
1608	03105 R 000006 A	6
1609	03106 R 000773 A	-5&777
1610	03107 R 000014 A	14
1611	03110 R 000774 A	-4&777
1612	03111 R 000015 A	15
1613	03112 R 000777 A	-1&777
1614	03113 R 000016 A	16
1615	03114 R 042515 A	.SIXBT 'DUMP'
	03115 R 200000 A	
1616	03116 R 000004 A	4
1617	03117 R 000764 A	-14&777
1618	03120 R 000002 A	2
1619	03121 R 000766 A	-12&777
1620	03122 R 000004 A	4
1621	03123 R 702422 A	.SIXBT 'STRAN'
	03124 R 011600 A	
1622	03125 R 000004 A	4
1623	03126 R 000763 A	-15&777
1624	03127 R 000002 A	2
1625	03130 R 000764 A	-14&777
1626	03131 R 000003 A	3
1627	03132 R 230705 A	.SIXBT 'SGEN'
	03133 R 160000 A	
1628	03134 R 000002 A	2

PAGE	49	DOSNRM	109	X/M/DOS	NRM	\$REQUEST
1629		03135	R	000764	A	-14&777
1630		03136	R	000010	A	10
1631		03137	R	050411	A	.SIXBT 'EDITVT'
		03140	R	242624	A	
1632		03141	R	000012	A	12 / (GAR-109)
1633		03142	R	000763	A	-15&777
1634		03143	R	000005	A	5
1635		03144	R	000764	A	-14&777
1636		03145	R	000007	A	7
1637		03146	R	000765	A	-13&777 / (GAR-109)
1638		03147	R	000024	A	24 / (GAR-109)
1639		03150	R	000766	A	-12&777
1640		03151	R	000004	A	4
1641		03152	R	000770	A	-10&777
1642		03153	R	000006	A	6
1643		03154	R	050411	A	.SIXBT 'EDITVP'
		03155	R	242620	A	
1644		03156	R	000014	A	14 / (GAR-109)
1645		03157	R	000763	A	-15&777
1646		03160	R	000005	A	5
1647		03161	R	000764	A	-14&777
1648		03162	R	000007	A	7
1649		03163	R	000765	A	-13&777 / (GAR-109)
1650		03164	R	000024	A	24 / (GAR-109)
1651		03165	R	000766	A	-12&777
1652		03166	R	000004	A	4
1653		03167	R	000770	A	-10&777
1654		03170	R	000006	A	6
1655		03171	R	000010	A	10&777
1656		03172	R	000021	A	21
1657		03173	R	152404	A	.SIXBT 'MTDUMP'
		03174	R	251520	A	
1658		03175	R	000004	A	4
1659		03176	R	000001	A	1&777
1660		03177	R	000007	A	7
1661		03200	R	000003	A	3&777
1662		03201	R	000003	A	3
1663		03202	R	210611	A	.SIXBT 'QFILE'
		03203	R	140500	A	
1664		03204	R	000002	A	2
1665		03205	R	000764	A	-14&777
1666		03206	R	000007	A	7
1667		03207	R	021723	A	.SIXBT 'BOSS'
		03210	R	230000	A	
1668		03211	R	000010	A	10
1669		03212	R	000006	A	6&777
1670		03213	R	000004	A	4
1671		03214	R	000764	A	-14&777
1672		03215	R	000002	A	2
1673		03216	R	000763	A	-15&777
1674		03217	R	000003	A	3
1675		03220	R	000005	A	5&777

1676	03221 R 000002 A	2
1677	03222 R 061703 A	.SIXBT 'FOCAL'
	03223 R 011400 A	
1678	03224 R 000012 A	12
1679	03225 R 000777 A	-1&777
1680	03226 R 000016 A	16
1681	03227 R 000003 A	3
1682	03230 R 000002 A	2
1683	03231 R 000005 A	5
1684	03232 R 000003 A	3
1685	03233 R 000007 A	7
1686	03234 R 000002 A	2
1687	03235 R 000010 A	10
1688	03236 R 000003 A	3
1689	03237 R 150103 A	.SIXBT 'MAC11'
	03240 R 616100 A	
1690	03241 R 000004 A	4
1691	03242 R 000766 A	-12&777
1692	03243 R 000004 A	4
1693	03244 R 000767 A	-11&777
1694	03245 R 000002 A	2
1695	03246 R 150314 A	.SIXBT 'MCLOAD'
	03247 R 170104 A	
1696	03250 R 000002 A	2
1697	03251 R 000764 A	-14&777
1698	03252 R 000010 A	10
1699	03253 R 232017 A	.SIXBT 'SPOOL'
	03254 R 171400 A	
1700	03255 R 000002 A	2
1701	03256 R 000764 A	-14&777
1702	03257 R 000010 A	10
1703	03260 R 232014 A	.SIXBT 'SPLGEN'
	03261 R 070516 A	
1704	03262 R 000002 A	2
1705	03263 R 000764 A	-14&777
1706	03264 R 000010 A	10
1707	03265 R 232014 A	.SIXBT 'SPLOAD'
	03266 R 170104 A	
1708	03267 R 000002 A	2
1709	03270 R 000764 A	-14&777
1710	03271 R 000010 A	10
1711	03272 R 000000 A	0
1712	003273 R	MSGTAB=.
1713	03273 R 446352 A	MS2 .ASCII 'INPUT'<15>
	03274 R 052650 A	
	03275 R 064000 A	
	03276 R 000000 A	
1714	03277 R 476532 A	MS3 .ASCII 'OUTPUT'<15>
	03300 R 450252 A	
	03301 R 520320 A	
	03302 R 000000 A	
1715	03303 R 462232 A	MS4 .ASCII 'LISTING'<15>

/START OF MSG TABLE (BR-089)

	03304 R 352222 A		
	03305 R 472161 A		
1716	03306 R 500000 A	MS6	.ASCII 'SECONDARY INPUT'<15>
	03307 R 516130 A		
	03310 R 347634 A		
	03311 R 422032 A		
	03312 R 254500 A		
	03313 R 446352 A		
	03314 R 052650 A		
	03315 R 064000 A		
1717	03316 R 000000 A	MS5	.ASCII 'OUTPUT/SCRATCH'<15>
	03317 R 476532 A		
	03320 R 450252 A		
	03321 R 521372 A		
	03322 R 341644 A		
	03323 R 406510 A		
1718	03324 R 344032 A	MS7	.ASCII 'I/O'<15>
	03325 R 445371 A		
1719	03326 R 706400 A	MS8	.ASCII 'I/O - SYS DEV'<15>
	03327 R 445371 A		
	03330 R 720132 A		
	03331 R 202473 A		
	03332 R 151500 A		
	03333 R 422132 A		
1720	03334 R 606400 A	MS9	.ASCII 'NEW FILE INPUT'<15>
	03335 R 472132 A		
	03336 R 720214 A		
	03337 R 446310 A		
	03340 R 520222 A		
	03341 R 472412 A		
1721	03342 R 552032 A	MS10	.ASCII 'ORG FILE INPUT'<15>
	03343 R 476450 A		
	03344 R 720214 A		
	03345 R 446310 A		
	03346 R 520222 A		
	03347 R 472412 A		
1722	03350 R 552032 A	MS11	.ASCII 'ERROR MSG'<15>
	03351 R 426452 A		
	03352 R 247644 A		
	03353 R 202332 A		
1723	03354 R 343432 A	MS12	.ASCII 'USER LIBR'<15>
	03355 R 526470 A		
	03356 R 551100 A		
	03357 R 462230 A		
1724	03360 R 251032 A	MS13	.ASCII 'USER PROG(S)'<15>
	03361 R 526470 A		
	03362 R 551100 A		
	03363 R 502451 A		
	03364 R 743520 A		
	03365 R 515221 A		
1725	03366 R 500000 A	MS14	.ASCII 'SYS LIBR'<15>
	03367 R 516632 A		

	03370 R 320230 A		
	03371 R 446052 A		
1726	03372 R 206400 A	MS17	.ASCII 'VIDEO OUTPUT'<15>
	03373 R 532230 A		
	03374 R 442636 A		
	03375 R 202372 A		
	03376 R 552240 A		
	03377 R 526501 A		
1727	03400 R 500000 A	MS18	.ASCII 'SCRATCH'<15>
	03401 R 516072 A		
	03402 R 240650 A		
	03403 R 416201 A		
1728	03404 R 500000 A	MS19	.ASCII 'SYSTEM MACRO FILE'<15>
	03405 R 516632 A		
	03406 R 352212 A		
	03407 R 465011 A		
	03410 R 540606 A		
	03411 R 512364 A		
	03412 R 043222 A		
	03413 R 462121 A		
1729	03414 R 500000 A	MS20	.ASCII 'SECONDARY OUTPUT'<15> / (BR-091)
	03415 R 516130 A		
	03416 R 347634 A		
	03417 R 422032 A		
	03420 R 254500 A		
	03421 R 476532 A		
	03422 R 450252 A		
	03423 R 520320 A		
1730	03424 R 000000 A	MTABLE	0 /NO MS0 (BR-089)
1731	03425 R 000000 A		0 /NO MS1 (BR-089)
1732			MSG 2
	03427 R 000000 A *G		MS2-MSGTAB
1733			MSG 3
	03430 R 000004 A *G		MS3-MSGTAB
1734			MSG 4
	03431 R 000010 A *G		MS4-MSGTAB
1735			MSG 5
	03432 R 000024 A *G		MS5-MSGTAB
1736			MSG 6
	03433 R 000014 A *G		MS6-MSGTAB
1737			MSG 7
	03434 R 000032 A *G		MS7-MSGTAB
1738			MSG 8
	03435 R 000034 A *G		MS8-MSGTAB
1739			MSG 9
	03436 R 000042 A *G		MS9-MSGTAB
1740			MSG 10
	03437 R 000050 A *G		MS10-MSGTAB
1741			MSG 11
	03440 R 000056 A *G		MS11-MSGTAB
1742			MSG 12



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1743		03441 R 000062 A *G		MS12-MSGTAB	
				MSG 13	
1744		03442 R 000066 A *G		MS13-MSGTAB	
				MSG 14	
1745		03443 R 000074 A *G		MS14-MSGTAB	
1746		03444 R 000000 A		0	/NO MSG15 (BR-089)
1747		03445 R 000000 A		0	/NO MSG16 (BR-089)
				MSG 17	
1748		03446 R 000100 A *G		MS17-MSGTAB	
				MSG 18	
1749		03447 R 000106 A *G		MS18-MSGTAB	
				MSG 19	
1750		03450 R 000112 A *G		MS19-MSGTAB	
				MSG 20	/(BR-091)
		03451 R 000122 A *G		MS20-MSGTAB	
1751				/	
1752				/SUBROUTINE RQTAB	
1753				/	
1754				/PACKS HT IN OUTPUT BUFFER	
1755				/	
1756		03452 R 000000 A		RQTAB 0	
1757	B	03453 R 211640 R		LAC (11	
1758		03454 R 101714 R		JMS KLPUT	
1759		03455 R 623452 R		JMP* RQTAB	
1760				/	
1761				/ROUTINE RQPAK6	
1762				/	
1763				/PACKS 3 .SIXBT CHARACTERS FOUND IN AC	
1764				/IN OUTPUT BUFFER IN 5/7 ASCII	
1765				/	
1766		03456 R 000000 A		RQPAK6 0	
1767		03457 R 043570 R		DAC RQTMP	/SAVE .SIXBT CHARACTERS
1768		03460 R 107747 R		JMS LSHFT6	
1769		03461 R 740010 A		RAL	
1770		03462 R 103471 R		JMS RQPAK	
1771		03463 R 203570 R		LAC RQTMP	/SECOND CHARACTER
1772		03464 R 107754 R		JMS RSHFT6	
1773		03465 R 103471 R		JMS RQPAK	
1774		03466 R 203570 R		LAC RQTMP	/THIRD CHARACTER
1775		03467 R 103471 R		JMS RQPAK	
1776		03470 R 623456 R		JMP* RQPAK6	/RETURN
1777		03471 R 000000 A		RQPAK 0	
1778	B	03472 R 511574 R		AND (77	
1779	B	03473 R 251575 R		XOR (40	
1780		03474 R 723240 A		AAC 240	
1781	B	03475 R 551643 R		SAD (300	
1782		03476 R 750000 A		CLA	
1783		03477 R 101714 R		JMS KLPUT	
1784		03500 R 623471 R		JMP* RQPAK	
1785				/	
1786				/DATA STORAGE FOR REQUEST COMMAND CODE	
1787				/	

1788	03501 R 272110 A	RQH	.ASCII	' .DAT' <11> 'DEVICE' <11> 'UIC' <15>
	03502 R 152022 A			
	03503 R 422132 A			
	03504 R 644606 A			
	03505 R 424232 A			
	03506 R 544606 A			
	03507 R 064000 A			
	03510 R 000000 A			
1789	03511 R 422110 A	RQLIN	.ASCII	'DDD' <11> 'DDD' <11> 'UIC' <15>
	03512 R 404610 A			
	03513 R 422101 A			
	03514 R 152622 A			
	03515 R 414320 A			
	03516 R 000000 A			
1790	03517 R		.BLOCK	20
1791	03537 R 000000 A	RQDM15	0	/ADDRESS OF .DAT -15
1792	03540 R 000000 A	RQUM15	0	/ " " UIC "
1793	03541 R 003542 R	RQD2	.+1	
1794	003542 R	RQD2BG=.		
1795	03542 R 556165 A		556165	
1796	03543 R 556164 A		556164	
1797	03544 R 556163 A		556163	
1798	03545 R 556162 A		556162	
1799	03546 R 556161 A		556161	
1800	03547 R 556160 A		556160	
1801	03550 R 556740 A		556740	
1802	003551 R	RQD2M7=.		
1803	03551 R 556640 A		556640	
1804	03552 R 556540 A		556540	
1805	03553 R 556440 A		556440	
1806	03554 R 556340 A		556340	
1807	003555 R	RQD2M3=.		
1808	03555 R 556240 A		556240	
1809	003556 R	RQD2M2=.		
1810	03556 R 556140 A		556140	
1811	003557 R	RQD2AL=.		
1812	03557 R 003560 R	RQD3	.+1	
1813	003560 R	RQD3BG=.		
1814	03560 R 536140 A		536140	
1815	03561 R 536240 A		536240	
1816	03562 R 536340 A		536340	
1817	03563 R 536440 A		536440	
1818	03564 R 536540 A		536540	
1819	03565 R 536640 A		536640	
1820	03566 R 536740 A		536740	
1821	003567 R	RQD3AL=.		
1822	03567 R 536160 A		536160	
1823	03570 R 000000 A	RQTMP	0	
1824	03571 R 526470 A	USER	.ASCII	'USER'
	03572 R 551000 A			
1825	03573 R 000774 A	DATEXC	000774	
1826	03574 R 000000 A	ENDEXC	0	

PAGE	55	DOSNRM	109	X/M/DOS	NRM	\$REQUEST
1827		03575	R	201120	A	PIP .SIXBT 'PIP'
1828		03576	R	000000	A	RQPOS 0
1829		03577	R	000773	A	DATLOD 000773
1830		03600	R	000774	A	000774
1831		03601	R	000777	A	000777
1832		03602	R	000000	A	ENDLOD 0
1833		03603	R	061703	A	FOCAL .SIXBT 'FOCAL'
		03604	R	011400	A	
1834		03605	R	000777	A	DATFCL 000777
1835		03606	R	000003	A	000003
1836		03607	R	000005	A	000005
1837		03610	R	000007	A	000007
1838		03611	R	000010	A	000010
1839		03612	R	000000	A	ENDFCL 0

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1840                                     .TITLE XMM/DOS NRM      $INSTRUCT
1841                                     /
1842                                     /$INSTRUCT COMMAND PROCESSOR
1843                                     /
1844                                     / THE TEXT FOR THIS MESSAGE IS NOW (V3A) A SEPARATE SOURCE FILE
1845                                     / 'INSALL SRC' & 'INSERR SRC' UNDER BNK & PAG UIC. THE TEXT IS TYPED
1846                                     / BY 'INSTRC BIN' PRESENT UNDER BNK & PAG UIC, WHICH IS LOADED BY
1847                                     / .SYSLD.
1848                                     /
1849                                     003613 R KLINS=.
1850                                     /ONLY '$INSTRUCT' AND '$INSTRUCT ERRORS' ARE LEGAL
1851                                     JMS      KLPGSH      /LOOK AT LINE
1852   B 03614 R 210007 R LAC      KLCOM
1853     03615 R 741200 A SNA
1854     03616 R 603633 R JMP      INS      /NOTHING TYPED IN
1855     03617 R 543640 R SAD      ERRORS   /SOMETHING TYPED IN.CHECK IF 'ERRORS'
1856     03620 R 741000 A SKP
1857     03621 R 600400 R JMP      BADINS   / 'ERRORS' NOT TYPED
1858   B 03622 R 210010 R LAC      KLCOM+1
1859     03623 R 543641 R SAD      ERRORS+1
1860     03624 R 741000 A SKP
1861     03625 R 600400 R JMP      BADINS   /'ERRORS' NOT TYPED
1862                                     /'ERROR' WAS TYPED, ASSUME 'ERRORS'
1863     03626 R 203644 R LAC      INSERR   /SET UP FOR ERROR MESSAGE PRINT OUT
1864   B 03627 R 050007 R DAC      KLCOM
1865     03630 R 203645 R LAC      INSERR+1
1866   B 03631 R 050010 R DAC      KLCOM+1
1867     03632 R 607613 R JMP      SYSLDR
1868                                                     /EAG:101
1869                                                     /EAG:101
1870                                     003633 R INS=.
1871     03633 R 203642 R LAC      INSALL   /SET UP FOR ALL
1872   B 03634 R 050007 R DAC      KLCOM
1873     03635 R 203643 R LAC      INSALL+1
1874   B 03636 R 050010 R DAC      KLCOM+1
1875     03637 R 607613 R JMP      SYSLDR
1876                                                     /EAG:101
1877                                                     /EAG:101
1878     03640 R 426452 A ERRORS .ASCII 'ERROR'
1879     03641 R 247644 A
1880     03642 R 111623 A INSALL .SIXBT 'INSALL'
1881     03643 R 011414 A
1882     03644 R 111623 A INSERR .SIXBT 'INSERR'
1883     03645 R 052222 A

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				.TITLE X/M/DOS NRM	\$SCOM
1879				/	
1880				/\$SCOM COMMAND PROCESSOR	
1881				/	
1882				KLSCOM=.	
1883		003646 R		DZM KL57	/TYPE HEADER WITH CURRENT
1884		03646 R 147711 R		LAC (SCMHDR+12	/DATE.
1885	B	03647 R 211644 R		DAC KLPUTP	
1886		03650 R 047703 R		JMS DTPRNT	
1887		03651 R 104576 R		LAC (12	
1888	B	03652 R 211566 R		JMS KLPUT	
1889		03653 R 101714 R		LAC (15	
1890	B	03654 R 211577 R		JMS KLPUT	
1891		03655 R 101714 R		LAC BANKBT	/TYPE BOOTSTRAP RESTART
1892		03656 R 207666 R		CLL!RAR	/ADDRESS.
1893		03657 R 744020 A		TAD (304000	
1894	B	03660 R 351645 R		DAC SCTEMP	
1895		03661 R 044426 R		LAC SCMBRA	
1896	B	03662 R 210120 R		AND (3777	
1897	B	03663 R 511646 R		XOR SCTEMP	
1898		03664 R 244426 R		DAC SCMBRA	
1899	B	03665 R 050120 R		LAC BANKBT	/TYPE FIRST FREE CELL BELOW
1900		03666 R 207666 R		CLL!RAR	/BOOTSTRAP.
1901		03667 R 744020 A		TAD (304000	
1902	B	03670 R 351645 R		DAC SCTEMP	
1903		03671 R 044426 R		LAC SCMFCE	
1904	B	03672 R 210135 R		AND (3777	
1905	B	03673 R 511646 R		XOR SCTEMP	
1906		03674 R 244426 R		DAC SCMFCE	
1907	B	03675 R 050135 R		DZM KL57	/TYPE ADDRESS OF .DAT.
1908		03676 R 147711 R		LAC (SCMDAT	
1909	B	03677 R 211647 R		DAC KLPUTP	
1910		03700 R 047703 R		LAC* (123	
1911	B	03701 R 231515 R		JMS RSHFT6	
1912		03702 R 107754 R		RTR	
1913		03703 R 742020 A		RAR	
1914		03704 R 740020 A		AND (7	
1915	B	03705 R 511610 R		AAC 60	
1916		03706 R 723060 A		JMS KLPUT	
1917		03707 R 101714 R		LAC* (123	
1918	B	03710 R 231515 R		JMS RSHFT6	
1919		03711 R 107754 R		AND (7	
1920	B	03712 R 511610 R		AAC 60	
1921		03713 R 723060 A		JMS KLPUT	
1922		03714 R 101714 R		LAC* (123	
1923	B	03715 R 231515 R		RTR	
1924		03716 R 742020 A		RAR	
1925		03717 R 740020 A		AND (7	
1926	B	03720 R 511610 R		AAC 60	
1927		03721 R 723060 A		JMS KLPUT	
1928		03722 R 101714 R		LAC* (123	
1929	B	03723 R 231515 R		AND (7	
1930	B	03724 R 511610 R			

1931		03725 R 723060 A	AAC	60	
1932		03726 R 101714 R	JMS	KLPUT	
1933		03727 R 147711 R	DZM	KL57	/TYPE ADDRESS OF .UFD
1934	B	03730 R 211650 R	LAC	(SCMUFD	
1935		03731 R 047703 R	DAC	KLPUTP	
1936	B	03732 R 231525 R	LAC*	(125	
1937		03733 R 107754 R	JMS	RSHFT6	
1938		03734 R 742020 A	RTR		
1939		03735 R 740020 A	RAR		
1940	B	03736 R 511610 R	AND	(7	
1941		03737 R 723060 A	AAC	60	
1942		03740 R 101714 R	JMS	KLPUT	
1943	B	03741 R 231525 R	LAC*	(125	
1944		03742 R 107754 R	JMS	RSHFT6	
1945	B	03743 R 511610 R	AND	(7	
1946		03744 R 723060 A	AAC	60	
1947		03745 R 101714 R	JMS	KLPUT	
1948	B	03746 R 231525 R	LAC*	(125	
1949		03747 R 742020 A	RTR		
1950		03750 R 740020 A	RAR		
1951	B	03751 R 511610 R	AND	(7	
1952		03752 R 723060 A	AAC	60	
1953		03753 R 101714 R	JMS	KLPUT	
1954	B	03754 R 231525 R	LAC*	(125	
1955	B	03755 R 511610 R	AND	(7	
1956		03756 R 723060 A	AAC	60	
1957		03757 R 101714 R	JMS	KLPUT	
1958		03760 R 147711 R	DZM	KL57	/TYPE # OF POSITIVE
1959	B	03761 R 211651 R	LAC	(SCMPOS	/DAT SLOTS.
1960		03762 R 047703 R	DAC	KLPUTP	
1961	B	03763 R 231514 R	LAC*	(124	
1962		03764 R 742020 A	RTR		
1963		03765 R 740020 A	RAR		
1964	B	03766 R 511610 R	AND	(7	
1965		03767 R 723060 A	AAC	60	
1966		03770 R 101714 R	JMS	KLPUT	
1967	B	03771 R 231514 R	LAC*	(124	
1968	B	03772 R 511610 R	AND	(7	
1969		03773 R 723060 A	AAC	60	
1970		03774 R 101714 R	JMS	KLPUT	
1971	B	03775 R 211634 R	LAC	(777777	/TYPE :
1972		03776 R 044350 R	DAC	STAPI	/API AVAILABLE
1973		03777 R 044351 R	DAC	STX/M	/X/M NOT AVAILABLE (BR-086)
1974	B	04000 R 231517 R	LAC*	(.SCOM+4	
1975		04001 R 740100 A	SMA		
1976		04002 R 604006 R	JMP	.+4	
1977	B	04003 R 211652 R	LAC	(SCMAPI	
1978		04004 R 044350 R	DAC	STAPI	
1979	B	04005 R 231517 R	LAC*	(.SCOM+4	
1980	B	04006 R 511552 R	AND	(000001	/IS X/M ENABLED (BR-086)
1981		04007 R 741200 A	SNA		/SKIP IF YES (BR-086)
1982		04010 R 604013 R	JMP	STST1	/NO-TRY BANK/PAGE (BR-086)

1983	B	04011	R	211653	R	LAC	(SCMX/M	/GET X/M MSG ADR (BR-086)
1984		04012	R	044351	R	DAC	STX/M	/PUT IN OUTPUT TABLE (BR-086)
1985	B	04013	R	231517	R	STST1	LAC*	(.SCOM+4
1986	B	04014	R	511520	R		AND	(100
1987		04015	R	741200	A		SNA	/TYPE PAGE/BANK MODE OPERATION
1988		04016	R	604024	R		JMP	+.6
1989		04017	R	204424	R		LAC	SCBANK
1990	B	04020	R	050231	R		DAC	SCMODE
1991		04021	R	204425	R		LAC	SCBANK+1
1992	B	04022	R	050232	R		DAC	SCMODE+1
1993		04023	R	604030	R		JMP	+.5
1994		04024	R	204422	R		LAC	SCPAGE
1995	B	04025	R	050231	R		DAC	SCMODE
1996		04026	R	204423	R		LAC	SCPAGE+1
1997	B	04027	R	050232	R		DAC	SCMODE+1
1998	B	04030	R	231517	R		LAC*	(104
1999	B	04031	R	511543	R		AND	(4000
2000		04032	R	741200	A		SNA	/TYPE 7 OR 9 CHANNEL
2001		04033	R	604037	R		JMP	+.4
2002		04034	R	204443	R		LAC	SCNINE
2003	B	04035	R	050241	R		DAC	SCMCHN
2004		04036	R	604041	R		JMP	+.3
2005		04037	R	204444	R		LAC	SCSEV/N
2006	B	04040	R	050241	R		DAC	SCMCHN
2007	B	04041	R	211634	R		LAC	(777777
2008		04042	R	044354	R		DAC	STLP
2009	B	04043	R	231517	R		LAC*	(.SCOM+4
2010	B	04044	R	511654	R		AND	(60
2011		04045	R	741200	A		SNA	
2012		04046	R	604075	R		JMP	SCM1+2
2013	B	04047	R	551655	R		SAD	(20
2014		04050	R	741000	A		SKP	
2015		04051	R	604057	R		JMP	+.6
2016		04052	R	204435	R		LAC	SCLP80
2017	B	04053	R	050261	R		DAC	SCMLPS
2018		04054	R	204436	R		LAC	SCLP80+1
2019	B	04055	R	050262	R		DAC	SCMLPS+1
2020		04056	R	604073	R		JMP	SCM1
2021	B	04057	R	551575	R		SAD	(40
2022		04060	R	741000	A		SKP	
2023		04061	R	604067	R		JMP	+.6
2024		04062	R	204437	R		LAC	SCL120
2025	B	04063	R	050261	R		DAC	SCMLPS
2026		04064	R	204440	R		LAC	SCL120+1
2027	B	04065	R	050262	R		DAC	SCMLPS+1
2028		04066	R	604073	R		JMP	SCM1
2029		04067	R	204441	R		LAC	SCL132
2030	B	04070	R	050261	R		DAC	SCMLPS
2031		04071	R	204442	R		LAC	SCL132+1
2032	B	04072	R	050262	R		DAC	SCMLPS+1
2033			R	004073	R	SCM1=.		
2034	B	04073	R	211656	R		LAC	(SCMLPS

2035		04074 R	044354 R	DAC	STLP	
2036	B	04075 R	217113 A	LAC	PROTCT	/TYPE DEFAULT PROTECTION CODE
2037	B	04076 R	511610 R	AND	(7	
2038		04077 R	723060 A	AAC	60	
2039		04100 R	744000 A	CLL		
2040		04101 R	107754 R	JMS	RSHT6	
2041		04102 R	742020 A	RTR		
2042		04103 R	044426 R	DAC	SCTEMP	
2043	B	04104 R	210323 R	LAC	SCMPRO	
2044	B	04105 R	511646 R	AND	(3777	
2045		04106 R	244426 R	XOR	SCTEMP	
2046	B	04107 R	050323 R	DAC	SCMPRO	
2047	B	04110 R	231657 R	LAC*	(.SCOM+54	/TYPE CURRENT PROTECTION CODE. (BR-089)
2048	B	04111 R	511610 R	AND (7		
2049		04112 R	723060 A	AAC	60	
2050		04113 R	744000 A	CLL		
2051		04114 R	107754 R	JMS	RSHT6	
2052		04115 R	742020 A	RTR		
2053		04116 R	044426 R	DAC	SCTEMP	
2054	B	04117 R	210341 R	LAC	CURPRO	
2055	B	04120 R	511646 R	AND	(3777	
2056		04121 R	244426 R	XOR	SCTEMP	
2057	B	04122 R	050341 R	DAC	CURPRO	
2058		04123 R	147711 R	DZM	KL57	/TYPE DEFAULT BUFFS SETTING
2059	B	04124 R	211660 R	LAC	(SCMBUF	
2060		04125 R	047703 R	DAC	KLPUTP	
2061	B	04126 R	217110 A	LAC	FILES	
2062		04127 R	104646 R	JMS	DTRCON	
2063		04130 R	723040 A	AAC	40	
2064		04131 R	103456 R	JMS	RQPAK6	
2065		04132 R	147711 R	DZM	KL57	/TYPE MANUAL ^Q RSTRT ADDR
2066	B	04133 R	211661 R	LAC	(SCMCQR	
2067		04134 R	047703 R	DAC	KLPUTP	
2068		04135 R	207740 R	LAC	MANSAL	
2069	B	04136 R	511662 R	AND	(7777	
2070		04137 R	044426 R	DAC	SCTEMP	
2071		04140 R	107754 R	JMS	RSHT6	
2072		04141 R	742020 A	RTR		
2073		04142 R	740020 A	RAR		
2074	B	04143 R	511610 R	AND	(7	
2075		04144 R	723060 A	AAC	60	
2076		04145 R	101714 R	JMS	KLPUT	
2077		04146 R	204426 R	LAC	SCTEMP	
2078		04147 R	107754 R	JMS	RSHT6	
2079	B	04150 R	511610 R	AND	(7	
2080		04151 R	723060 A	AAC	60	
2081		04152 R	101714 R	JMS	KLPUT	
2082		04153 R	204426 R	LAC	SCTEMP	
2083		04154 R	742020 A	RTR		
2084		04155 R	740020 A	RAR		
2085	B	04156 R	511610 R	AND	(7	
2086		04157 R	723060 A	AAC	60	



2087		04160 R	101714 R	JMS	KLPUT	
2088		04161 R	204426 R	LAC	SCTEMP	
2089	B	04162 R	511610 R	AND	(7	
2090		04163 R	723060 A	AAC	60	
2091		04164 R	101714 R	JMS	KLPUT	
2092				/NOW DO ACTUAL TYPING OF SCOM		
2093	B	04165 R	211663 R	LAC	(SCMTBL	
2094		04166 R	042621 R	DAC	RQPNT	
2095	B	04167 R	211664 R	LAC	(JMS PRNFST	
2096		04170 R	044200 R	DAC	SCMLP1	
2097			004171 R	SCMLOP=.		
2098		04171 R	222621 R	LAC*	RQPNT	
2099		04172 R	741200 A	SNA		
2100		04173 R	604206 R	JMP	SCMHAN	
2101	B	04174 R	551634 R	SAD	(777777	
2102		04175 R	604204 R	JMP	SCMINC	
2103		04176 R	723776 A	AAC	-2	
2104		04177 R	044201 R	DAC	..+2	
2105		04200 R	100506 R	SCMLP1 JMS	PRINT	
2106		04201 R	740040 A	XX		
2107	B	04202 R	211665 R	LAC	(JMS PRINT	
2108		04203 R	044200 R	DAC	SCMLP1	
2109			004204 R	SCMINC=.		
2110		04204 R	442621 R	ISZ	RQPNT	
2111		04205 R	604171 R	JMP	SCMLOP	
2112			004206 R	SCMHAN=.		
2113	B	04206 R	211552 R	LAC	(1	/COMPUTE POINTERS TO
2114	B	04207 R	357101 A	TAD	NOPAR	/SKIP TABLE AND
2115	B	04210 R	357102 A	TAD	NODAT	/DEVICE TABLE IN
2116		04211 R	347734 R	TAD	.SGNBL	/SGNBLK (SGNSKP=SKIP
2117		04212 R	044427 R	DAC	SGNSKP	/TABLE, SGNDEV=DEVICE
2118	B	04213 R	357103 A	TAD	NOSKP	/TABLE).
2119		04214 R	044430 R	DAC	SGNDEV	
2120		04215 R	442621 R	SCMH.0 ISZ	RQPNT	/SPACE DOWN TO NEXT MSG
2121		04216 R	222621 R	LAC*	RQPNT	/ARE WE DONE WITH
2122		04217 R	741200 A	SNA		/HANDLERS?
2123		04220 R	604260 R	JMP	SCMSKI	/YES, TYPE SKIP CHAIN
2124		04221 R	044426 R	DAC	SCTEMP	/NO, SEARCH DEVICE TABLE
2125		04222 R	224426 R	LAC*	SCTEMP	/FOR THIS HANDLER
2126		04223 R	044426 R	DAC	SCTEMP	
2127		04224 R	204430 R	LAC	SGNDEV	/INITIALIZE DYNAMIC POINTER
2128		04225 R	044433 R	DAC	SGNDV/P	/TO DEVICE TABLE
2129		04226 R	224433 R	SCMH.1 LAC*	SGNDV/P	/MATCH?
2130	B	04227 R	511546 R	AND	(770000	/HANDLERLESS DEVICE (BR-089)
2131		04230 R	741200 A	SNA		/SKIP IF NOT (BR-089)
2132		04231 R	604242 R	JMP	SCMH.3	/YES - SKIP OVER SKIPS (BR-089)
2133		04232 R	224433 R	LAC*	SGNDV/P	/TEST FOR MATCH (BR-089)
2134		04233 R	544426 R	SAD	SCTEMP	
2135		04234 R	604253 R	JMP	SCMH.2	/YES, PRINT MESSAGE
2136		04235 R	444433 R	ISZ	SGNDV/P	/NO, LOOK FOR NEXT ENTRY
2137		04236 R	224433 R	LAC*	SGNDV/P	/IS THERE ANOTHER VERSION
2138	B	04237 R	511546 R	AND	(770000	/OF SAME HANDLER?

2139		04240 R	740200 A		SZA		
2140		04241 R	604226 R		JMP	SCMH.1	/YES
2141		04242 R	224433 R	SCMH.3	LAC*	SGNDV/P	/NO, MOVE DOWN TO NEXT (BR-089)
2142		04243 R	364433 R		TAD*	SGNDV/P	/HANDLER.
2143		04244 R	364433 R		TAD*	SGNDV/P	
2144		04245 R	740030 A		IAC		
2145		04246 R	344433 R		TAD	SGNDV/P	
2146		04247 R	044433 R		DAC	SGNDV/P	
2147		04250 R	547735 R		SAD	LSGNBL	/ARE WE AT END OF ATBEL?
2148		04251 R	604215 R		JMP	SCMH.0	/YES, DO NOT PRINT
2149		04252 R	604226 R		JMP	SCMH.1	/NO, CHECK.
2150		04253 R	222621 R	SCMH.2	LAC*	RQNT	
2151		04254 R	044256 R		DAC	.+2	
2152		04255 R	107204 R		JMS	MPRINT	
2153		04256 R	740040 A		XX		
2154		04257 R	604215 R		JMP	SCMH.0	
2155			004260 R	SCMSKI=.			
2156		04260 R	100506 R		JMS	PRINT	
2157		04261 R	011452 R		SCM26-2		
2158	B	04262 R	217103 A		LAC	NOSKP	
2159		04263 R	740031 A		TCA		/TWOCMA (BR-080)
2160		04264 R	044431 R		DAC	SKPCNT	
2161	B	04265 R	211552 R		LAC	(1	
2162	B	04266 R	357101 A		TAD	NOPAR	
2163	B	04267 R	357102 A		TAD	NODAT	
2164	B	04270 R	357103 A		TAD	NOSKP	
2165		04271 R	740031 A		TCA		/TWOCMA (BR-080)
2166	B	04272 R	357100 A		TAD	SGNBLK	
2167		04273 R	044432 R		DAC	DEV/CNT	
2168		04274 R	224427 R		LAC*	SGNSKP	
2169		04275 R	104302 R		JMS	SCMLUP	
2170		04276 R	444427 R		ISZ	SGNSKP	
2171		04277 R	444431 R		ISZ	SKPCNT	
2172		04300 R	604274 R		JMP	.-4	
2173		04301 R	600320 R		JMP	KLOK	
2174		04302 R	000000 A	SCMLUP	0		
2175		04303 R	044426 R		DAC	SCTEMP	
2176		04304 R	204430 R		LAC	SGNDEV	
2177		04305 R	044433 R		DAC	SGNDV/P	
2178		04306 R	204432 R		LAC	DEV/CNT	
2179		04307 R	740031 A		TCA		/TWOCMA (BR-080)
2180		04310 R	044434 R		DAC	DEV/CTP	
2181			004311 R	SCMLP2=.			
2182		04311 R	224433 R		LAC*	SGNDV/P	
2183		04312 R	544426 R		SAD	SCTEMP	
2184		04313 R	604320 R		JMP	SCMLP3	
2185		04314 R	444433 R		ISZ	SGNDV/P	
2186		04315 R	444434 R		ISZ	DEV/CTP	
2187		04316 R	604311 R		JMP	SCMLP2	
2188		04317 R	624302 R		JMP*	SCMLUP	
2189			004320 R	SCMLP3=.			
2190		04320 R	204433 R		LAC	SGNDV/P	

PAGE	63	DOSNRM	109	X/M/DOS	NRM	\$SCOM
2191		04321	R	723776	A	AAC -2
2192		04322	R	044433	R	DAC SGNDV/P
2193		04323	R	147711	R	DZM KL57
2194	B	04324	R	211666	R	LAC (SCMSKP
2195		04325	R	047703	R	DAC KLPUTP
2196	B	04326	R	211640	R	LAC (11
2197		04327	R	101714	R	JMS KLPUT
2198		04330	R	224433	R	LAC* SGNDV/P
2199		04331	R	103456	R	JMS RQPAK6
2200		04332	R	444433	R	ISZ SGNDV/P
2201		04333	R	224433	R	LAC* SGNDV/P
2202		04334	R	103456	R	JMS RQPAK6
2203	B	04335	R	211577	R	LAC (15
2204		04336	R	101714	R	JMS KLPUT
2205		04337	R	100506	R	JMS PRINT
2206		04340	R	011462	R	SCMSKP-2
2207		04341	R	624302	R	JMP* SCMLUP
2208				004342	R	SCMTBL=.
2209		04342	R	010101	R	SCMHDR
2210		04343	R	010120	R	SCMBRA
2211		04344	R	010135	R	SCMFCB
2212		04345	R	010155	R	SCMDAT
2213		04346	R	010166	R	SCMUFD
2214		04347	R	010177	R	SCMPOS
2215		04350	R	010213	R	STAPI SCMAPI
2216		04351	R	010221	R	STX/M SCMX/M /X/M ENABLED MSG (BR-086)
2217		04352	R	010231	R	SCMODE
2218		04353	R	010241	R	SCMCHN
2219		04354	R	010261	R	STLP SCMLPS
2220		04355	R	010323	R	SCMPRO
2221		04356	R	010341	R	CURPRO
2222		04357	R	010357	R	SCMBUF
2223		04360	R	010305	R	SCMCQR
2224		04361	R	010373	R	SCM01
2225		04362	R	000000	A	0
2226		04363	R	010405	R	SCM2
2227		04364	R	010426	R	SCM3
2228		04365	R	010450	R	SCM4
2229		04366	R	010474	R	SCM5
2230		04367	R	010514	R	SCM6
2231		04370	R	010541	R	SCM7
2232		04371	R	010563	R	SCM8
2233		04372	R	010606	R	SCM9
2234		04373	R	010631	R	SCM10
2235		04374	R	010654	R	SCM11
2236		04375	R	010676	R	SCM12
2237		04376	R	010717	R	SCM13
2238		04377	R	010737	R	SCM14
2239		04400	R	010762	R	SCM15
2240		04401	R	011005	R	SCM16
2241		04402	R	011030	R	SCM17
2242		04403	R	011053	R	SCM18

2243	04404 R 011076 R	SCM19	
2244	04405 R 011122 R	SCM19A	
2245	04406 R 011145 R	SCM19B	
2246	04407 R 011170 R	SCM19C	
2247	04410 R 011214 R	SCM20	
2248	04411 R 011237 R	SCM21	
2249	04412 R 011262 R	SCM22	
2250	04413 R 011302 R	SCM23	
2251	04414 R 011325 R	SCM24	
2252	04415 R 011351 R	SCM25	
2253	04416 R 011376 R	SCM27	
2254	04417 R 011404 R	SCM27A	
2255	04420 R 011431 R	SCM28	
2256	04421 R 000000 A	0	
2257	04422 R 502030 A	SCPAGE	.ASCII 'PAGE '
	04423 R 742500 A		
2258	04424 R 412031 A	SCBANK	.ASCII 'BANK '
	04425 R 645500 A		
2259	04426 R 000000 A	SCTEMP	0
2260	04427 R 000000 A	SGNSKP	0
2261	04430 R 000000 A	SGNDEV	0
2262	04431 R 000000 A	SKPCNT	0
2263	04432 R 000000 A	DEV/CNT	0
2264	04433 R 000000 A	SGNDV/P	0
2265	04434 R 000000 A	DEV/CTP	0
2266	04435 R 201606 A	SCLP80	.ASCII ' 80-C'
	04436 R 026606 A		
2267	04437 R 305446 A	SCL120	.ASCII '120-C'
	04440 R 026606 A		
2268	04441 R 305466 A	SCL132	.ASCII '132-C'
	04442 R 226606 A		
2269	04443 R 345010 A	SCNINE	.ASCII '9 C'
	04444 R 300000 A		
2270	04444 R	.LOC	.-1
2271	04444 R 335010 A	SCSEVN	.ASCII '7 C'
	04445 R 300000 A		
2272	04445 R	.LOC	.-1

				.TITLE X/M/DOS NRM	\$DATE
2273					
2274				/	
2275				/\$DATE COMMAND PROCESSOR	
2276				/	
2277		004445 R		KLDATE=.	
2278		04445 R 207675 R	LAC	KLCHAR	/WAS A DATE TYPED IN?
2279	B	04446 R 551577 R	SAD	(15	/MAYBE
2280		04447 R 604564 R	JMP	DTECHO	/NO. ECHO DATE IN .SCOM+47.
2281	B	04450 R 551576 R	SAD	(175	
2282		04451 R 604564 R	JMP	DTECHO	
2283		04452 R 101664 R	JMS	KLGET	/SKIP OVER BLANKS
2284	B	04453 R 551575 R	SAD	(40	
2285		04454 R 604452 R	JMP	.-2	
2286	B	04455 R 551577 R	SAD	(15	/WAS A DATE TYPED IN?
2287		04456 R 604564 R	JMP	DTECHO	/NO. ECHO DATE.
2288	B	04457 R 551576 R	SAD	(175	
2289		04460 R 604564 R	JMP	DTECHO	
2290		04461 R 144627 R	DZM	SCOM47	/YES. PROCESS MONTH.
2291		04462 R 723720 A	AAC	-60	/FIRST DIGIT
2292		04463 R 044625 R	DAC	DTTMP1	
2293		04464 R 101664 R	JMS	KLGET	
2294	B	04465 R 551667 R	SAD	(57	/IS THERE A SECOND?
2295		04466 R 604501 R	JMP	DTMON2	/NO
2296		04467 R 723720 A	AAC	-60	/YES
2297		04470 R 044626 R	DAC	DTTMP2	
2298		004471 R		DTMON1=.	
2299		04471 R 104631 R	JMS	DTCONV	/CONVERT DECIMAL TO OCTAL (2 DIGITS)
2300		04472 R 107770 R	JMS	PLIMCN	
2301		04473 R 000014 A	14		
2302		04474 R 600406 R	JMP	BADATE	
2303		04475 R 107754 R	JMS	RSHT6	
2304		04476 R 740020 A	RAR		
2305		04477 R 044627 R	DAC	SCOM47	
2306		04500 R 604505 R	JMP	DTDAY	
2307		004501 R		DTMON2=.	
2308		04501 R 204625 R	LAC	DTTMP1	/MOVE 0 IN FIRST DIGIT
2309		04502 R 044626 R	DAC	DTTMP2	
2310		04503 R 144625 R	DZM	DTTMP1	
2311		04504 R 604471 R	JMP	DTMON1	
2312		004505 R		DTDAY=.	
2313		04505 R 101664 R	JMS	KLGET	
2314	B	04506 R 551667 R	SAD	(57	
2315		04507 R 101664 R	JMS	KLGET	/PROCESS DAY.
2316		04510 R 723720 A	AAC	-60	/FIRST DIGIT
2317		04511 R 044625 R	DAC	DTTMP1	
2318		04512 R 101664 R	JMS	KLGET	
2319	B	04513 R 551667 R	SAD	(57	/IS THERE A SECOND?
2320		04514 R 604527 R	JMP	DTDAY2	/NO
2321		04515 R 723720 A	AAC	-60	/YES
2322		04516 R 044626 R	DAC	DTTMP2	
2323		004517 R		DTDAY1=.	
2324		04517 R 104631 R	JMS	DTCONV	/CONVERT DECIMAL TO OCTAL (2 DIGIT)

2325		04520 R 107770 R	JMS	PLIMCN	
2326		04521 R 000037 A	37		
2327		04522 R 600406 R	JMP	BADATE	
2328		04523 R 107747 R	JMS	LSHFT6	
2329		04524 R 244627 R	XOR	SCOM47	
2330		04525 R 044627 R	DAC	SCOM47	
2331		04526 R 604533 R	JMP	DTYEAR	
2332		004527 R			
2333		04527 R 204625 R	LAC	DTTMP1	
2334		04530 R 044626 R	DAC	DTTMP2	
2335		04531 R 144625 R	DZM	DTTMP1	
2336		04532 R 604517 R	JMP	DTDAY1	
2337		004533 R			
2338		04533 R 101664 R	JMS	KLGET	
2339	B	04534 R 551667 R	SAD	(57	
2340		04535 R 101664 R	JMS	KLGET	/PROCESS YEAR MODULO 1970 (DEC).
2341		04536 R 723720 A	AAC	-60	/FIRST DIGIT
2342		04537 R 044625 R	DAC	DTTMP1	
2343		04540 R 101664 R	JMS	KLGET	
2344	B	04541 R 551577 R	SAD	(15	/IS THERE A SECOND?
2345		04542 R 604560 R	JMP	DTYR2	/NO.
2346	B	04543 R 551576 R	SAD	(175	
2347		04544 R 604560 R	JMP	DTYR2	/NO.
2348		04545 R 723720 A	AAC	-60	/YES
2349		04546 R 044626 R	DAC	DTTMP2	
2350		004547 R			
2351		04547 R 104631 R	JMS	DTCONV	/CONVERT DECIMAL TO OCTAL (2 DIGITS)
2352		04550 R 723672 A	AAC	-106	/ADJUST MODULO 70
2353		04551 R 107770 R	JMS	PLIMCN	
2354		04552 R 000035 A	35		
2355		04553 R 600406 R	JMP	BADATE	
2356		04554 R 244627 R	XOR	SCOM47	
2357	B	04555 R 071533 R	DAC*	(147	
2358		04556 R 440056 R	ISZ	SYSRES	
2359		04557 R 600320 R	JMP	KLOK	/ALL DONE! (BR-089)
2360		004560 R			
2361		04560 R 204625 R	LAC	DTTMP1	
2362		04561 R 044626 R	DAC	DTTMP2	
2363		04562 R 144625 R	DZM	DTTMP1	
2364		04563 R 604547 R	JMP	DTYR1	
2365		004564 R			
2366		04564 R 147711 R	DZM	KL57	/ECHO DATE
2367	B	04565 R 211670 R	LAC	(DTLIN+2	/INITIALIZE 5/7 PACKING ROUTINE
2368		04566 R 047703 R	DAC	KLPUTP	
2369		04567 R 104576 R	JMS	DTPRNT	
2370	B	04570 R 211577 R	LAC	(15	
2371		04571 R 101714 R	JMS	KLPUT	
2372		04572 R 105006 R	JMS	BOSTTY	
2373		04573 R 100440 R	JMS	TYPE	
2374		04574 R 004615 R	DTLIN-2		
2375		04575 R 600320 R	JMP	KLOK	/ALL DONE! (BR-089)
2376					

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PAGE 67      DOSNRM 109      X/M/DOS NRM $DATE

2377      04576 R 000000 A      DTPRNT 0
2378      /ECHO MONTH
2379      B      04577 R 231533 R      LAC*      (147
2380      04600 R 107747 R      JMS      LSHFT6
2381      04601 R 740010 A      RAL
2382      04602 R 104646 R      JMS      DTRCON
2383      04603 R 723057 A      AAC      57
2384      04604 R 103456 R      JMS      RQPAK6
2385      /ECHO DAY
2386      B      04605 R 231533 R      LAC*      (147
2387      04606 R 107754 R      JMS      RSHFT6
2388      04607 R 104646 R      JMS      DTRCON
2389      04610 R 723057 A      AAC      57
2390      04611 R 103456 R      JMS      RQPAK6
2391      /ECHO YEAR
2392      B      04612 R 231533 R      LAC*      (147
2393      04613 R 104646 R      JMS      DTRCON
2394      B      04614 R 351671 R      TAD      (070040
2395      04615 R 103456 R      JMS      RQPAK6
2396      04616 R 624576 R      JMP*      DTPRNT
2397      /
2398      /DATA REGISTERS FOR $DATE
2399      DTLIN .ASCII 'DATE'      '<15>'

      04617 R 422032 A
      04620 R 442500 A
      04621 R 201004 A
      04622 R 020100 A
      04623 R 201004 A
      04624 R 006400 A
2400      04625 R 000000 A      DTTMP1 0
2401      04626 R 000000 A      DTTMP2 0
2402      04627 R 000000 A      SCOM47 0
2403      04630 R 000000 A      MODESW 0      /ONCE ONLY SWITCH FOR DATE - MODE TYP0UT(BR-082)
2404      /
2405      /UTILITY ROUTINES FOR $DATE
2406      /
2407      /SUBROUTINE DTCONV
2408      /
2409      /CONVERTS TWO DIGITS, IN DTTMP1 AND DTTMP2, FROM DECIMAL
2410      /TO A 2-DIGIT OCTAL VALUE LEFT IN AC
2411      04631 R 000000 A      DTCONV 0
2412      04632 R 204626 R      LAC      DTTMP2
2413      04633 R 107761 R      JMS      DGITCK      /CHECK FOR VALID DIGIT
2414      04634 R 204625 R      LAC      DTTMP1
2415      04635 R 107761 R      JMS      DGITCK      /CHECK FOR VALID DIGIT
2416      04636 R 204625 R      LAC      DTTMP1
2417      04637 R 744000 A      CLL
2418      04640 R 742010 A      RTL
2419      04641 R 740010 A      RAL
2420      04642 R 344625 R      TAD      DTTMP1
2421      04643 R 344625 R      TAD      DTTMP1
2422      04644 R 344626 R      TAD      DTTMP2
2423      04645 R 624631 R      JMP*      DTCONV

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2424
2425 /SUBROUTINE DTRCON
2426 /
2427 /CONVERTS A TWO DIGIT OCTAL VALUE FOUND IN AC TO
2428 /A .SIXBT DECIMAL NOTATION. THE RESULT IS LEFT IN AC LEFT
2429 /ADJUSTED.
2430 /
2431 DTRCON 0
2432 B 04647 R 511574 R AND (??
2433 04650 R 144625 R DZM DTTMP1
2434 004651 R DTRLP=.
2435 04651 R 044626 R DAC DTTMP2
2436 04652 R 723766 A AAC -12
2437 04653 R 741100 A SPA
2438 04654 R 604657 R JMP DTRDON
2439 04655 R 444625 R ISZ DTTMP1
2440 04656 R 604651 R JMP DTRLP
2441 004657 R DTRDON=.
2442 04657 R 744000 A CLL
2443 04660 R 204625 R LAC DTTMP1
2444 04661 R 723060 A AAC 60
2445 04662 R 107747 R JMS LSHFT6
2446 04663 R 344626 R TAD DTTMP2
2447 04664 R 723060 A AAC 60
2448 04665 R 107747 R JMS LSHFT6
2449 04666 R 624646 R JMP* DTRCON

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2450 .TITLE X/M/DOS NRM $TIME
2451 /
2452 /$TIME COMMAND RPROCESSOR
2453 /
2454 KLTIME=.
2455 004667 R 207675 R LAC KLCHAR /WAS TIME TYPED IN?
2456 B 04670 R 551577 R SAD (15 /MAYBE.
2457 04671 R 604736 R JMP TMECHO /NO.ECHO TIME IN .SCOM+50.
2458 B 04672 R 551576 R SAD (175
2459 04673 R 604736 R JMP TMECHO
2460 04674 R 101664 R JMS KLGET /SKIP OVER BLANKS
2461 B 04675 R 551575 R SAD (40
2462 04676 R 604674 R JMP .-2
2463 B 04677 R 551577 R SAD (15 /WAS TIME TYPED IN?
2464 04700 R 604736 R JMP TMECHO /NO. ECHO TIME.
2465 B 04701 R 551576 R SAD (175
2466 04702 R 604736 R JMP TMECHO
2467 04703 R 145005 R DZM SCOM50 /YES. PROCESS HOURS.
2468 04704 R 723720 A AAC -60
2469 04705 R 044625 R DAC DTTMP1 /FIRST DIGIT
2470 04706 R 101664 R JMS KLGET
2471 04707 R 723720 A AAC -60
2472 04710 R 044626 R DAC DTTMP2 /SECOND DIGIT
2473 04711 R 104631 R JMS DTCONV /CONVERT HOURS TO OCTAL
2474 /
2475 /(RKB-106) FOLLOWING TWO LINES DELETED TO
2476 /(RKB-106) ENABLE TIME OF '0000' TO BE OK
2477 /
2478 /
2479 /
2480 04712 R 107770 R JMS PLIMCN
2481 04713 R 000030 A 30
2482 04714 R 600411 R JMP BADTIM
2483 04715 R 107754 R JMS RSHFT6
2484 04716 R 740020 A RAR
2485 04717 R 045005 R DAC SCOM50 /PACK HOURS IN .SCOM+50
2486 04720 R 101664 R JMS KLGET /PROCESS MINUTES.
2487 04721 R 723720 A AAC -60
2488 04722 R 044625 R DAC DTTMP1 /FIRST DIGIT
2489 04723 R 101664 R JMS KLGET
2490 04724 R 723720 A AAC -60
2491 04725 R 044626 R DAC DTTMP2 /SECOND DIGIT
2492 04726 R 104631 R JMS DTCONV /CONVERT MINUTEST TO OCTAL.
2493 04727 R 107770 R JMS PLIMCN
2494 04730 R 000073 A 73
2495 04731 R 600411 R JMP BADTIM
2496 04732 R 107747 R JMS LSHFT6
2497 04733 R 245005 R XOR SCOM50
2498 B 04734 R 071672 R DAC* (.SCOM+50
2499 04735 R 600320 R JMP KLOK /ALL DONE!
2500 004736 R TMECHO=. /ECHO TIME.
2501 04736 R 147711 R DZM KL57 /INITIALIZE 5/7 PACKING ROUTINE

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2502 B 04737 R 211673 R LAC TMLIN+2
2503 04740 R 047703 R DAC KLPUTP
2504 /CONVERT HOURS TO .SIXBT
2505 B 04741 R 231672 R LAC* (.SCOM+50
2506 04742 R 045005 R DAC SCOM50
2507 04743 R 107747 R JMS LSHFT6
2508 04744 R 740010 A RAL
2509 04745 R 104646 R JMS DTRCON
2510 04746 R 045004 R DAC TMTMP1
2511 /CONVERT MINUTEST TO .SIXBT
2512 04747 R 205005 R LAC SCOM50
2513 04750 R 107754 R JMS RSHFT6
2514 04751 R 104646 R JMS DTRCON
2515 /PACK HOURS AND MINUTES IN 5/7 .ASCII IN OUTPUT BUFFER
2516 04752 R 045006 R DAC BOSTTY
2517 04753 R 107747 R JMS LSHFT6
2518 04754 R 740010 A RAL
2519 B 04755 R 511574 R AND (??
2520 04756 R 245004 R XOR TMTMP1
2521 04757 R 103456 R JMS RQPAK6
2522 04760 R 205005 R LAC SCOM50
2523 04761 R 104646 R JMS DTRCON
2524 04762 R 107754 R JMS RSHFT6
2525 B 04763 R 511662 R AND (007777
2526 04764 R 045004 R DAC TMTMP1
2527 04765 R 205006 R LAC BOSTTY
2528 04766 R 107747 R JMS LSHFT6
2529 B 04767 R 511546 R AND (770000
2530 04770 R 245004 R XOR TMTMP1
2531 04771 R 103456 R JMS RQPAK6
2532 B 04772 R 211577 R LAC (15
2533 04773 R 101714 R JMS KLPUT
2534 04774 R 105006 R JMS BOSTTY
2535 04775 R 100440 R JMS TYPE
2536 04776 R 004776 R TMLIN-2
2537 04777 R 600320 R JMP KLOK
2538 /
2539 /DATA REGISTERS FOR $TIME
2540 /
2541 TMLIN .ASCII 'TIME '<15>
05000 R 522231 A
05001 R 542500 A
05002 R 201004 A
05003 R 020032 A
2542 05004 R 000000 A TMTMP1 0
2543 05005 R 000000 A SCOM50 0
2544 05006 R 000000 A BOSTTY 0
2545 B 05007 R 231531 R LAC* (152
2546 05010 R 740100 A SMA
2547 05011 R 625006 R JMP* BOSTTY
2548 B 05012 R 251532 R XOR (20000
2549 B 05013 R 071531 R DAC* (152
2550 05014 R 625006 R JMP* BOSTTY

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2551 .TITLE X/M/DOS NRM SET TIME LIMIT
2552 /
2553 /$TIMEST COMMAND PROCESSOR
2554 /
2555 TIMLIM=.
2556 05015 R 144626 R DZM DTTMP2
2557 05016 R 145004 R DZM TMTMP1
2558 05017 R 101664 R JMS KLGET /GET CHARACTER
2559 B 05020 R 551575 R SAD (40 /IF BLANK IGNORE IT
2560 05021 R 605017 R JMP TIMLIM+2
2561 B 05022 R 551577 R SAD (15 /IF CR FINISH
2562 05023 R 605051 R JMP TIML.2
2563 B 05024 R 551674 R SAD (72 /IF COLON, CONVERT MINS TO SECS
2564 05025 R 605042 R JMP TIML.1
2565 05026 R 723720 A AAC -60 /CONVERT TO OCTAL
2566 05027 R 107770 R JMS PLIMCN /MAKE SURE IT'S A DIGIT
2567 05030 R 000011 A 11
2568 05031 R 605057 R JMP LIMBAD /IT ISN'T
2569 05032 R 044625 R DAC DTTMP1 /IT'S GOOD, ADD IT TO TOTAL IN TMTMP1
2570 05033 R 205004 R LAC TMTMP1
2571 05034 R 673122 A MUL!SHAL
2572 05035 R 000012 A 12
2573 05036 R 641002 A LACQ
2574 05037 R 344625 R TAD DTTMP1
2575 05040 R 045004 R DAC TMTMP1
2576 05041 R 605017 R JMP TIMLIM+2 /FETCH NEXT CHARACTER
2577 05042 R 205004 R TIML.1 LAC TMTMP1 /MULTIPLY TOTAL IN TMTMP1
2578 05043 R 673122 A MUL!SHAL /BY 60(DEC)
2579 05044 R 000074 A 74
2580 05045 R 641002 A LACQ
2581 05046 R 044626 R DAC DTTMP2
2582 05047 R 145004 R DZM TMTMP1
2583 05050 R 605017 R JMP TIMLIM+2 /FETCH NEXT CHARACTER
2584 05051 R 205004 R TIML.2 LAC TMTMP1 /ANY TIME?
2585 05052 R 344626 R TAD DTTMP2
2586 05053 R 740200 A SZA /NO, SKIP
2587 05054 R 740031 A TCA /TWO'S COMPLEMENT OF (BR-081)
2588 B 05055 R 071554 R DAC* (.SCOM+56 /TIME IN .SCOM+56
2589 05056 R 600320 R JMP KLOK
2590 05057 R 777704 A LIMBAD LAW -74 / (RKB-106) SET DEFAULT TO 1 MIN. FOR BOSS
2591 B 05060 R 071554 R DAC* (.SCOM+56
2592 05061 R 600414 R JMP BADLIM

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2593 .TITLE X/M/DOS NRM $KEEP
2594 /
2595 /$KEEP ON/OFF COMMAND PROCESSOR
2596 /
2597 KLKEEP=.
2598 05062 R 105124 R JMS ONOFF /'ON' OR 'OFF'?
2599 05063 R 605072 R JMP KEEPON /'ON'
2600 05064 R 777775 A LAW 17775
2601 B 05065 R 531526 R AND* (142
2602 B 05066 R 071526 R DAC* (142
2603 05067 R 106751 R JMS UFDUPD
2604 05070 R 107023 R JMS DATSTP
2605 05071 R 600320 R JMP KLOK
2606 005072 R
2607 05072 R 777775 A KEEPON=. LAW 17775 /LAC (777775
2608 B 05073 R 531526 R AND* (142
2609 B 05074 R 251530 R XOR (2
2610 B 05075 R 071526 R DAC* (142
2611 05076 R 600320 R JMP KLOK

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2612                                     .TITLE X/M/DOS NRM      $PROTECT
2613                                     /
2614                                     /$PROTECT COMMAND PROCESSOR
2615                                     /
2616                                     KLPRO=.
2617      05077 R 207675 R      LAC      KLCHAR      /WAS CODE TYPED?
2618      005100 R      PRCHK=.
2619      B 05100 R 551577 R      SAD      (15
2620      05101 R 600320 R      JMP      KLOK      /NO.
2621      B 05102 R 551576 R      SAD      (175
2622      05103 R 600320 R      JMP      KLOK      /NO.
2623      B 05104 R 551575 R      SAD      (40
2624      05105 R 605122 R      JMP      PRCHK1     /MAYBE, KEEP CHECKING
2625      05106 R 723720 A      AAC      -60        /MAKE SURE LEGAL CODE
2626      05107 R 044625 R      DAC      DTTMP1
2627      B 05110 R 551552 R      SAD      (1        /TEST FOR LEGAL VALUE (1) (BR-088)
2628      05111 R 605117 R      JMP      KLPR1     /LEGAL - CONTINUE (BR-088)
2629      B 05112 R 551530 R      SAD      (2        /TEST FOR LEGAL 2 (BR-088)
2630      05113 R 605117 R      JMP      KLPR1     /LEGAL - CONTINUE (BR-088)
2631      B 05114 R 551675 R      SAD      (3        /TEST FOR LEGAL VALUE (BR-088)
2632      05115 R 605117 R      JMP      KLPR1     /LEGAL - CONTINUE (BR-088)
2633      05116 R 600353 R      JMP      ILLCOD    /NOT LEGAL - ERROR (BR-088)
2634      05117 R 204625 R      KLPR1   LAC      DTTMP1
2635      B 05120 R 071657 R      DAC*     (.SCOM+54
2636      05121 R 600320 R      JMP      KLOK
2637      005122 R      PRCHK1=.
2638      05122 R 101664 R      JMS      KLGET
2639      05123 R 605100 R      JMP      PRCHK      /TRY NEXT CHARACTER

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2640          .TITLE X/M/DOS NRM 'ONOFF'
2641          /
2642          /ONOFF ROUTINE
2643          /USED BY DEVICES THAT ACCEPT 'ON' OR 'OFF'
2644          /AS PARAMETERS.
2645          /CALLING SEQUENCE
2646          /      JMS      ONOFF
2647          /      (RETURN IF 'ON')
2648          /      (RETURN IF 'OFF')
2649          /IF NEITHER : JMP ILLONF
2650          ONOFF=.
2651          05124 R 000000 A      0
2652          05125 R 106147 R      JMS      KLPGSH      /'ON' OR 'OFF'?
2653          B 05126 R 210007 R      LAC      KLCOM
2654          05127 R 547743 R      SAD      ON
2655          05130 R 625124 R      JMP*     ONOFF      /'ON'
2656          05131 R 445124 R      ISZ      ONOFF
2657          05132 R 547744 R      SAD      OFF
2658          05133 R 625124 R      JMP*     ONOFF      /'OFF'
2659          05134 R 600356 R      JMP      ILLONF

```

```

2660 .TITLE XMM/DOS NRM $TAB
2661 /
2662 /$TAB ON/OFF PROCESSOR
2663 /
2664 KL33TY=.
2665 005135 R 105124 R JMS ONOFF // 'ON' OR 'OFF'?
2666 05136 R 605144 R JMP TTYON
2667 B 05137 R 231517 R LAC* (.SCOM+4
2668 B 05140 R 511676 R AND (677777
2669 B 05141 R 251677 R XOR (100000
2670 B 05142 R 071517 R DAC* (.SCOM+4
2671 05143 R 607643 R JMP NRMEXI
2672 TTYON=.
2673 B 05144 R 231517 R LAC* (.SCOM+4
2674 B 05145 R 511676 R AND (677777
2675 B 05146 R 071517 R DAC* (.SCOM+4
2676 05147 R 607643 R JMP NRMEXI

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2677				.TITLE	M/DOS NRM	\$FILL
2678				/		
2679				/ FILL ON/OFF PROCESSOR		
2680			005150 R	KLLA30=.		
2681		05150 R	105124 R	JMS	ONOFF	/ON OR OFF?
2682		05151 R	605156 R	JMP	LTTYON	
2683	B	05152 R	231517 R	LAC*	(.SCOM+4	/OFF. RESET BIT 10 (BR-080)
2684	B	05153 R	511700 R	AND	(777577	/CLEAR BIT 10 (BR-080)
2685	B	05154 R	071517 R	DAC*	(.SCOM+4	/SAVE (BR-080)
2686		05155 R	607643 R	JMP	NRMEXI	
2687			005156 R	LTTYON=.		
2688	B	05156 R	231517 R	LAC*	(.SCOM+4	/GET BIT 10 SCOM+4 (BR-080)
2689	B	05157 R	511700 R	AND	(777577	/CLEAR BIT 10 (BR-080)
2690		05160 R	723200 A	AAC	200	/RESET BIT 10 (BR-080)
2691	B	05161 R	071517 R	DAC*	(.SCOM+4	/SAVE (BR-080)
2692		05162 R	607643 R	JMP	NRMEXI	



```

2693 .TITLE XIM/DOS NRM $API
2694 /
2695 /$API ON/OFF PROCESSOR
2696 /
2697 005163 R KLAPI=.
2698 / JMS SETMD /SET MODE TYPEOUT ENABLE (BR-087)
2699 05163 R 105124 R JMS ONOFF /GET ON/OFF
2700 05164 R 605166 R JMP APION /PROCESS ON
2701 05165 R 605170 R JMP APIOFF /PROCESS OFF
2702 005166 R APION=.
2703 05166 R 754002 A CLA!CLL!CML
2704 05167 R 605171 R JMP .+2
2705 005170 R APIOFF=.
2706 05170 R 754000 A CLA!CLL /LINK 0 IS OFF
2707 05171 R 750020 A CLA!RAR
2708 B 05172 R 271517 R XOR* (.SCOM+4
2709 B 05173 R 511701 R AND (400000
2710 B 05174 R 271517 R XOR* (.SCOM+4
2711 B 05175 R 071517 R DAC* (.SCOM+4
2712 05176 R 607643 R JMP NRMEXI

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2713 .TITLE X/M/DOS NRM \$/T ON/OFF

2714					/EAG:101
2715					/EAG:101
2716					/EAG:101
2717					/EAG:101
2718		/			/EAG:101
2719		/ VT ON/OFF PROCESSOR			/EAG:101
2720		/			/EAG:101
2721					/EAG:101
2722	05177 R 105124 R	KLVT	JMS ONOFF	/ CHECK WHETHER 'TIS VT ON OR	/EAG:101
2723	05200 R 751001 A		CLA!CMA!SKP	/ OFF. -1 TO AC IF VT ON,	/EAG:101
2724	05201 R 750000 A		CLA	/ 0 TO AC IF VT OFF.	/EAG:101
2725	B 05202 R 271702 R		XOR* (.SCOM+33)	/ MERGE BIT INTO .SCOM+33	/EAG:101
2726	B 05203 R 511677 R		AND (1000000)		/EAG:101
2727	B 05204 R 271702 R		XOR* (.SCOM+33)		/EAG:101
2728	B 05205 R 071702 R		DAC* (.SCOM+33)		/EAG:101
2729	05206 R 607643 R		JMP NRMEXI	/ AND EXIT	/EAG:101

PAGE	79	DOSNRM	109	X/M/DOS	NRM	\$X/M
						.TITLE X/M/DOS NRM \$X/M
2730						/
2731						/ \$X/M ON/OFF PROCESSOR
2732						/
2733						/
2734			005207	R		KLX/M=.
2735						/
2736		05207	R	105124	R	JMS SETMD /SET MODE TYPEOUT ENABLE (BR-087)
2737		05210	R	605215	R	JMS ONOFF /GET ON/OFF SWITCH (BR-081)
2738	B	05211	R	231517	R	JMP X/MON /SWITCH WAS ON (BR-081)
2739	B	05212	R	511703	R	LAC* (.SCOM+4 /SWITCH OFF-GET SCOM SETTING (BR-081)
2740	B	05213	R	071517	R	AND (777776 /CLEAR ENABLE BIT (BR-081)
2741		05214	R	607643	R	DAC* (.SCOM+4 /SAVE SCOM SETTING (BR-081)
2742	B	05215	R	231517	R	JMP NRMEXI /RETURN (BR-081)
2743	B	05216	R	511703	R	X/MON LAC* (.SCOM+4 /GET SCOM BIT SETTING (BR-081)
2744	B	05217	R	251552	R	AND (777776 /CLEAR ENABLE BIT IF ON (BR-081)
2745	B	05220	R	071517	R	XOR (000001 /SET BIT (BR-081)
2746		05221	R	607643	R	DAC* (.SCOM+4 /SAVE SCOM SETTING (BR-081)
						JMP NRMEXI /RETURN (BR-081)

PAGE	80	DOSNRM	109	X/M/DOS	NRM	\$UC15
2747					.TITLE	X/M/DOS NRM \$UC15
2748					/	
2749					/\$UC15 ON/OFF PROCESSOR	
2750					/	
2751		005222	R		KLUC15=.	
2752					/	
2753		05222	R	105124	R	JMS SETMD /SET MODE TYPEOUT ENABLE (BR-087)
2754		05223	R	605230	R	JMS ONOFF /GET ON/OFF SWITCH (BR-081)
2755	B	05224	R	231517	R	JMP UC15ON /SWITCH WAS ON (BR-081)
2756	B	05225	R	511704	R	LAC* (.SCOM+4 /SWITCH OFF-GET SCOM SETTING (BR-081)
2757	B	05226	R	071517	R	AND (777775 /CLEAR ENABLE BIT (BR-081)
2758		05227	R	607643	R	DAC* (.SCOM+4 /SAVE SCOM BIT SETTING (BR-081)
2759	B	05230	R	231517	R	JMP NRMEXI /RETURN (BR-081)
2760	B	05231	R	511704	R	UC15ON LAC* (.SCOM+4 /GET SCOM BIT SETTING (BR-081)
2761	B	05232	R	251530	R	AND (777775 /CLEAR ENABLE BIT IF ON (BR-081)
2762	B	05233	R	071517	R	XOR (000002 /SET BIT (BR-081)
2763		05234	R	607643	R	DAC* (.SCOM+4 /SAVE SCOM BIT SETTING (BR-081)
					JMP NRMEXI /RETURN (BR-081)	



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2813 .TITLE X/M/DOS NRM $POLLR
2814 /
2815 /$POLLR ON/OFF PROCESSOR
2816 /
2817 005310 R KLPLR=.
2818 / JMS SETMD /SET MODE TYPEOUT ENABLE (BR-087)
2819 05310 R 105124 R JMS ONOFF
2820 05311 R 741000 A SKP
2821 05312 R 605320 R JMP PLROFF
2822 /$POLLR ON
2823 B 05313 R 231517 R LAC* (.SCOM+4 /GET POLLER BIT WORD (BR-080)
2824 B 05314 R 511707 R AND (777773 /CLEAR POLLER BIT (BR-080)
2825 B 05315 R 251710 R XOR (000004 /SET POLLER BIT (BR-080)
2826 B 05316 R 071517 R DAC* (.SCOM+4 /SAVE NEW SETTING (BR-080)
2827 05317 R 607643 R JMP NRMEXI /EXIT (BR-080)
2828 /POLLER OFF
2829 B 05320 R 231517 R LAC* (.SCOM+4 /GET POLLER BIT WORD (BR-080)
2830 B 05321 R 511707 R AND (777773 /CLEAR POLLER BIT (BR-080)
2831 B 05322 R 071517 R DAC* (.SCOM+4 /SAVE NEW SETTING (BR-080)
2832 05323 R 607643 R JMP NRMEXI /EXIT (BR-080)
2833 /

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2834      .TITLE  X/M/DOS NRM  MODE
2835      /
2836      /$MODE PROCESSOR
2837      /
2838      005324 R
2839      05324 R 105326 R
2840      05325 R 600320 R
2841      /
2842      /
2843      /
2844      05326 R 000000 A      DOMODE 0      /SUBROUTINE TO TYPE MODE SETTINGS (BR-082)
2845      05327 R 147711 R      DZM      KL57      /SET UP PACKING AND STUFFING ROUTINE (BR-0939)
2846      B 05330 R 211711 R      LAC      (MODBUF+2      /GET BUFFER POINTER (BR-093)
2847      05331 R 047703 R      DAC      KLPUTP      /SET UP STUFF ADDRESS (BR-093)
2848      B 05332 R 231526 R      LAC*     (.SCOM+42      /GET HARDWARE PRESENT WORD
2849      05333 R 721000 A      PAX      /SAVE IT
2850      B 05334 R 231517 R      LAC*     (.SCOM+4      /GET HARDWARE ENABLE WORD
2851      05335 R 722000 A      PAL      /SAVE IT
2852      B 05336 R 511520 R      AND      (000100      /IS IT BANK OR PAGE (BR-085)
2853      05337 R 740200 A      SZA      /SKIP IF PAGE
2854      05340 R 605344 R      JMP      MP1      /BANK-JUMP
2855      05341 R 101772 R      JMS      STUFF      /STUFF PAGE MODE
2856      05342 R 005522 R      PPAG      /" (BR-085)
2857      05343 R 605346 R      JMP      MP2      /CONTINUE
2858      05344 R 101772 R      MP1      JMS      STUFF      /STUFF BANK MODE
2859      05345 R 005514 R      PBNK      /" (BR-085)
2860      05346 R 105600 R      MP2      JMS      KPRNT      /PRINT MEMSIZ (BR-083)
2861      05347 R 724000 A      MP3      PXA      /GET PRESENT WORD
2862      B 05350 R 511712 R      AND      (000200      /IS API AVAILABLE
2863      05351 R 741200 A      SNA      /SKIP IF AVAILABLE
2864      05352 R 605363 R      JMP      MP5      /NO-CONTINUE
2865      05353 R 730000 A      PLA      /GET ENABLE WORD
2866      05354 R 740100 A      SMA      /SKIP IF API ENABLE
2867      05355 R 605361 R      JMP      MP4      /JUMP TO API OFF
2868      05356 R 101772 R      JMS      STUFF      /STUFF API ON
2869      05357 R 005530 R      PAPI      /"
2870      05360 R 605363 R      JMP      MP5      /CONTINUE
2871      05361 R 101772 R      MP4      JMS      STUFF      /STUFF API OFF
2872      05362 R 005534 R      PNAPI      /"
2873      05363 R 724000 A      MP5      PXA      /GET PRESENT WORD
2874      B 05364 R 511575 R      AND      (000040      /IS X/M HARDWARE PRESENT
2875      05365 R 741200 A      SNA      /SKIP IF PRESENT
2876      05366 R 605400 R      JMP      MP7      /NO-CONTINUE
2877      05367 R 730000 A      PLA      /GET ENABLE WORD
2878      B 05370 R 511552 R      AND      (000001      /IS X/M ENABLED
2879      05371 R 741200 A      SNA      /SKIP IF ENABLED
2880      05372 R 605376 R      JMP      MP6      /JUMP TO X/M OFF
2881      05373 R 101772 R      JMS      STUFF      /STUFF X/M ON
2882      05374 R 005540 R      PX/M      /"
2883      05375 R 605400 R      JMP      MP7      /CONTINUE
2884      05376 R 101772 R      MP6      JMS      STUFF      /STUFF X/M OFF
2885      05377 R 005544 R      PN/M      /"

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PAGE	84	DOSNR	109	X/M/DOS	NRM	\$MODE	
2886		05400	R 724000	A	MP7	PXA	/GET PRESENT WORD
2887	B	05401	R 511520	R		AND (000100	/IS UC15 HARDWARE PRESENT
2888		05402	R 741200	A		SNA	/SKIP IF PRESENT
2889		05403	R 605426	R		JMP MP11	/NO-CONTINUE
2890		05404	R 730000	A		PLA	/GET ENABLE WORD
2891	B	05405	R 511530	R		AND (000002	/IS UC15 ENABLED
2892		05406	R 741200	A		SNA	/SKIP IF ENABLED
2893		05407	R 605413	R		JMP MP8	/JUMP TO UC15 OFF
2894		05410	R 101772	R		JMS STUFF	/STUFF UC15 ON
2895		05411	R 005550	R		PUC15	/"
2896		05412	R 605415	R		JMP MP9	/CONTINUE
2897		05413	R 101772	R	MP8	JMS STUFF	/STUFF UC15 OFF
2898		05414	R 005554	R		PNUC15	/"
2899		05415	R 730000	A	MP9	PLA	/GET ENABLE WORD
2900	B	05416	R 511710	R		AND (000004	/IS POLLER ENABLED
2901		05417	R 741200	A		SNA	/SKIP IF ENABLED
2902		05420	R 605424	R		JMP MP10	/JUMP TO POLLER OFF
2903		05421	R 101772	R		JMS STUFF	/STUFF POLLER ON
2904		05422	R 005562	R		PPLR	/"
2905		05423	R 605426	R		JMP MP11	/CONTINUE
2906		05424	R 101772	R	MP10	JMS STUFF	/STUFF POLLER OFF
2907		05425	R 005570	R		PNPLR	/"
2908	B	05426	R 211575	R	MP11	LAC (40	/GET A SPACE (BR-092)
2909		05427	R 101714	R		JMS KLPUT	/PACK IT (BR-092)
2910	B	05430	R 231523	R		LAC* (.SCOM+41	/GET CURRENT UIC (BR-092)
2911		05431	R 744000	A		CLL	/SET UP SHIFT (BR-092)
2912		05432	R 640514	A		LRS 14	/GET FIRST CHAR (BR-092)
2913	B	05433	R 251575	R		XOR (40	/MAKE 7-BIT (BR-092)
2914		05434	R 723040	A		AAC 40	/"""" (BR-093)
2915		05435	R 101714	R		JMS KLPUT	/PACK IT (BR-092)
2916	B	05436	R 231523	R		LAC* (.SCOM+41	/GET UIC AGAIN (BR-092)
2917		05437	R 640506	A		LRS 6	/GET SECOND CHAR (BR-092)
2918	B	05440	R 511574	R		AND (000077	/AND NOTHING ELSE (BR-092)
2919	B	05441	R 251575	R		XOR (40	/MAKE 7-BIT (BR-092)
2920		05442	R 723040	A		AAC 40	/"""" (BR-093)
2921		05443	R 101714	R		JMS KLPUT	/AND PACK IT (BR-092)
2922	B	05444	R 231523	R		LAC* (.SCOM+41	/GET UIC AGAIN (BR-092)
2923	B	05445	R 511574	R		AND (000077	/GET THIRD CHAR (BR-092)
2924	B	05446	R 251575	R		XOR (40	/MAKE IT 7-BIT (BR-092)
2925		05447	R 723040	A		AAC 40	/"""" (BR-093)
2926		05450	R 101714	R		JMS KLPUT	/AND PACK IT (BR-092)
2927		05451	R 101772	R	MP12	JMS STUFF	/STUFF CR/LF
2928		05452	R 005576	R		PCR	/"
2929		05453	R 100440	R		JMS TYPE	/PRINT OUT BUFFER (BR-093)
2930		05454	R 005456	R		MODBUF	/POINTER TO MODE BUFFER (BR-093)
2931		05455	R 625326	R		JMP* DOMODE	/RETURN TO CALLER
2932		05456	R 017002	A	MODBUF	017002	/DUMMY BUFFER HEADER PAIR
2933		05457	R 000000	A		0	/"
2934		05460	R	A		.BLOCK 34	/BUFFER FOR MODE TYPEOUT (BR-093)
2935		05514	R 106050	A	PBNK	.ASCII <21>/BANK MODE	<0>
		05515	R 147226	A			
		05516	R 202331	A			



PAGE	85	DOSNRM 109	X/M/DOS	NRM	\$MODE
		05517 R 742212 A			
		05520 R 200000 A			
		05521 R 000000 A			
2936		05522 R 106410 A	PPAG	.ASCII	<21>/PAGE MODE /<0>
		05523 R 143612 A			
		05524 R 202331 A			
		05525 R 742212 A			
		05526 R 200000 A			
		05527 R 000000 A			
2937		05530 R 202032 A	PAPI	.ASCII	/ API ON /<0>
		05531 R 044500 A			
		05532 R 476344 A			
		05533 R 000000 A			
2938		05534 R 202032 A	PNAPI	.ASCII	/ API OFF /<0>
		05535 R 044500 A			
		05536 R 476150 A			
		05537 R 620000 A			
2939		05540 R 202612 A	PX/M	.ASCII	/ X/M ON /<0>
		05541 R 646500 A			
		05542 R 476344 A			
		05543 R 000000 A			
2940		05544 R 202612 A	PNX/M	.ASCII	/ X/M OFF /<0>
		05545 R 646500 A			
		05546 R 476150 A			
		05547 R 620000 A			
2941		05550 R 202530 A	PUC15	.ASCII	/ UC15 ON /<0>
		05551 R 330552 A			
		05552 R 202371 A			
		05553 R 620000 A			
2942		05554 R 202530 A	PNUC15	.ASCII	/ UC15 OFF /<0>
		05555 R 330552 A			
		05556 R 202370 A			
		05557 R 643100 A			
		05560 R 000000 A			
		05561 R 000000 A			
2943		05562 R 202411 A	PPLR	.ASCII	/ POLLER ON /<0>
		05563 R 746230 A			
		05564 R 426444 A			
		05565 R 047634 A			
		05566 R 200000 A			
		05567 R 000000 A			
2944		05570 R 202411 A	PNPLR	.ASCII	/ POLLER OFF /<0>
		05571 R 746230 A			
		05572 R 426444 A			
		05573 R 047614 A			
		05574 R 431000 A			
		05575 R 000000 A			
2945		05576 R 064240 A	PCR	.ASCII	<15><12><0>
		05577 R 000000 A			
2946		/			
2947		/			
2948		/			

THIS SUBROUTINE PRINTS THE MEMORY SIZE (+1) FOUND IN .SCOM+20  
AS A NUMBER IN THE FORM NNNK.NO LF OR CR ARE PERFORMED

2949									
2950		05600	R	000000	A	KPRNT	0		/ENTRY TO PRINT NNNK ROUTINE (BR-083)
2951		05601	R	730000	A		PLA		/GET LIMIT REG (BR-085)
2952		05602	R	045642	R		DAC	KPTMP	/SAVE IN TEMP (BR-085)
2953	B	05603	R	211575	R		LAC	(40	/PUT LEADING BLANK IN (BR-083)
2954		05604	R	101714	R		JMS	KLPUT	/PUT IN BUF (BR-083)
2955	B	05605	R	231706	R		LAC*	(.SCOM+20	/GET MEMSIZ-1 (BR-083)
2956		05606	R	744030	A		IAC!CLL		/MAKE IT MEMSIZ (BR-083)
2957		05607	R	640512	A		LRS	12	/DIVIDE BY 1K (BR-083)
2958		05610	R	653323	A		IDIV		/DIVIDE BY 100 (BR-085)
2959		05611	R	000144	A		144		/100 (BR-083)
2960		05612	R	722000	A		PAL		/SAVE REMAINDER (BR-083)
2961		05613	R	641002	A		LACQ		/GET RESULT (BR-083)
2962		05614	R	741200	A		SNA		/SKIP IF NON-ZERO (BR-083)
2963		05615	R	777760	A		LAW	-20	/IF ZERO MAKE CHAR A BLANK (BR-083)
2964		05616	R	723060	A		AAC	60	/MAKE A CHAR (BR-083)
2965		05617	R	101714	R		JMS	KLPUT	/PACK IT (BR-083)
2966		05620	R	730000	A		PLA		/GET REMAINDER (BR-083)
2967		05621	R	744000	A		CLL		/SET UP IDIV (BR-085)
2968		05622	R	653323	A		IDIV		/DIVIDE BY 10 (BR-085)
2969		05623	R	000012	A		12		/TEN (BR-083)
2970		05624	R	722000	A		PAL		/SAVE REMAINDER (BR-083)
2971		05625	R	641002	A		LACQ		/GET RESULT (BR-083)
2972		05626	R	723060	A		AAC	60	/MAKE A CHAR (EVEN IF ZERO) (BR-083)
2973		05627	R	101714	R		JMS	KLPUT	/PUT IF BUF (BR-083)
2974		05630	R	730000	A		PLA		/GET ONES (BR-083)
2975		05631	R	723060	A		AAC	60	/MAKE A CHAR (BR-083)
2976		05632	R	101714	R		JMS	KLPUT	/PUT IN BUF (BR-083)
2977	B	05633	R	211713	R		LAC	(113	/PUT K IN BUF (BR-083)
2978		05634	R	101714	R		JMS	KLPUT	/PUT IN BUF (BR-083)
2979	B	05635	R	211575	R		LAC	(40	/PUT TRAILING BLANK IN BUF (BR-083)
2980		05636	R	101714	R		JMS	KLPUT	/PUT IN BUF (BR-083)
2981		05637	R	205642	R		LAC	KPTMP	/RESTORE LIMIT REG (BR-085)
2982		05640	R	722000	A		PAL		/" (BR-085)
2983		05641	R	625600	R		JMP*	KPRNT	/RETURN TO CALLER (BR-083)
2984		05642	R	000000	A	KPTMP	0		/TEMP STORAGE FOR LIMIT REG. (BR-085)

PAGE	87	DOSNRM 109	X/M/DOS NRM \$HALF ON/OFF		
			.TITLE X/M/DOS NRM	\$HALF ON/OFF	
2985					/EAG:101
2986					/EAG:101
2987					/EAG:101
2988					/EAG:101
2989					/EAG:101
2990			/		/EAG:101
2991			/ HALF ON/OFF PROCESSOR		/EAG:101
2992			/		/EAG:101
2993					/EAG:101
2994		05643 R 105124 R	KLHALF JMS ONOFF	/ CHECK WHETHER 'TIS HALF ON OR	/EAG:101
2995		05644 R 751001 A	CLA!CMA!SKP	/ OFF. -1 TO AC IF HALF ON,	/EAG:101
2996		05645 R 750000 A	CLA	/ 0 TO AC IF HALF OFF.	/EAG:101
2997	B	05646 R 271702 R	XOR* (.SCOM+33)	/ MERGE BIT INTO .SCOM+33	/EAG:101
2998	B	05647 R 511701 R	AND (400000)		/EAG:101
2999	B	05650 R 271702 R	XOR* (.SCOM+33)		/EAG:101
3000	B	05651 R 071702 R	DAC* (.SCOM+33)		/EAG:101
3001		05652 R 607643 R	JMP NRMEXI	/ AND EXIT	/EAG:101

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3002 .TITLE X/M/DOS NRM $LP
3003
3004 /$LP ON/OFF PROCESSOR
3005 /
3006 005653 R KLLP=.
3007 05653 R 105124 R JMS ONOFF // ON' OR 'OFF'?
3008 05654 R 605656 R JMP LPON // ON'
3009 05655 R 605663 R JMP LPOFF // OFF'
3010 B 05656 R 231526 R LPON LAC* (142 /TURN BIT 3 ON OF .SCOM+42
3011 B 05657 R 511714 R AND (737777
3012 B 05660 R 251715 R XOR (40000
3013 B 05661 R 071526 R DAC* (142
3014 05662 R 607643 R JMP NRMEXI
3015 B 05663 R 231526 R LPOFF LAC* (142
3016 B 05664 R 511714 R AND (737777
3017 B 05665 R 071526 R DAC* (142
3018 05666 R 607643 R JMP NRMEXI

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PAGE	89	DOSNRM 109	X/M/DOS NRM \$PAGE, \$BANK
3019			.TITLE X/M/DOS NRM \$PAGE, \$BANK
3020			/
3021			/\$PAGE ON/OFF CPMMDAND PROCESSOR
3022			/
3023		005667 R	KLPGAGE=.
3024			JMS SETMD /SET MODE TYPEOUT ENABLE (BR-087)
3025		05667 R 105124 R	JMS ONOFF /'ON' OR 'OFF'?
3026		05670 R 605675 R	JMP KL.PGE /'ON'
3027		05671 R 605701 R	JMP KL.BNK /'OFF'
3028			/
3029			/\$BANK ON/OFF COMMAND PROCESSOR
3030			/
3031		005672 R	KLBBANK=.
3032			JMS SETMD /SET MODE TYPEOUT ENABLE (BR-087)
3033		05672 R 105124 R	JMS ONOFF /'ON' OR 'OFF'?
3034		05673 R 605701 R	JMP KL.BNK /'ON'
3035		05674 R 605675 R	JMP KL.PGE /'OFF'
3036			/
3037		005675 R	KL.PGE=.
3038		05675 R 777677 A	LAW 17677 /SET PAGE MODE
3039	B	05676 R 531517 R	AND* (.SCOM+4
3040	B	05677 R 071517 R	DAC* (.SCOM+4
3041		05700 R 600320 R	JMP KLOK /EXIT WITH MODE TYPEOUT (BR-085)
3042			/
3043		005701 R	KL.BNK=.
3044		05701 R 777677 A	LAW 17677 /SET BANK MODE
3045	B	05702 R 531517 R	AND* (.SCOM+4
3046	B	05703 R 251520 R	XOR (100
3047	B	05704 R 071517 R	DAC* (.SCOM+4
3048		05705 R 600320 R	JMP KLOK /EXIT WITH MODE TYPEOUT (BR-085)

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3049          .TITLE X/M/DOS NRM $BATCH
3050          /
3051          / BATCH DV/ COMMAND
3052          /
3053          000141 A SC.UIC=.SCOM+41          /(GAR:095) CURRENT UIC
3054          000142 A SC.NMF=.SCOM+42          /(GAR:095) MONITOR FLAGS WORD.
3055          000152 A SC.BOS=.SCOM+52          /(GAR:095)
3056          000157 A SC.SDV=.SCOM+57          /(GAR:095) SYSTEM DEVICE'S HANDLER NUMBER.
3057          000175 A SC.RTF=.SCOM+75          /(GAR:095) NO. OF LINES READ INTO BATCH FILE.
3058          000206 A SC.BFN=.SCOM+106         /(GAR:095) BATCH FILENAME.
3059          /                                /(GAR:095) (ZERO IF NON-FILE ORIENTED ...
3060          /                                /(GAR:095) BATCH DEVICE.)
3061          000210 A SC.BFXT=.SCOM+110        /(RKB-106) BATCH FILENAME'S EXTENSION.
3062          /                                /(RKB-106) DEFAULT IS 'BAT'.
3063          /                                /(RKB-106) EXTENSION OTHER THAN DEFAULT
3064          /                                /(RKB-106) IS NOT CURRENTLY SUPPORTED.
3065          /                                /(RKB-106) CHANGE 'BEXTSW' TO A 'NOP'
3066          /                                /(RKB-106) TO ENABLE OPTIONAL EXTENSION
3067          /                                /(RKB-106) FOLLOWING FILENAME ON $BATCH
3068          /                                /(RKB-106) COMMAND TYPEIN.
3069          000211 A SC.BUIC=.SCOM+111        /(RKB-106) BATCH UIC.
3070          000212 A SC.BDEV=.SCOM+112        /(RKB-106) BATCH DEVICE MNEMONIC IN .SIXBT.
3071          000213 A SC.BUNT=.SCOM+113        /(RKB-106) BATCH DEVICE UNIT NUMBER
3072          /                                /(RKB-106) IN BITS 0-2. REST RESERVED.
3073          B 05706 R 231531 R KLBAT LAC* (SC.BOS) /(GAR:095) ARE WE IN BOSS X/M MODE?
3074          05707 R 741100 A SPA              /(GAR:095) IF SO, THE BATCH COMMAND IS ILLEGAL!
3075          05710 R 600342 R JMP KLWHAT        /(RKB-106) YES - DON'T START BATCH MODE.
3076          05711 R 777776 A LAW 777776       /(RKB-106) RESET MASTER BATCH MODE BIT
3077          B 05712 R 531526 R AND* (SC.NMF)  /(RKB-106) IN CASE AN ERROR IS DETECTED
3078          B 05713 R 071526 R DAC* (SC.NMF)  /(RKB-106) ON A 'CHAINED' $BATCH WE
3079          /                                /(RKB-106) WILL LEAVE BATCH MODE VIA 'FLUSH'
3080          B 05714 R 171716 R DZM* (SC.BDEV)  /(GAR:095) ASSUME UNIT #0 FOR THE BATCH DEVICE.
3081          B 05715 R 171576 R DZM* (SC.RTF)   /(GAR:095) INITIALIZE THE BATCH FILE LINE COUNTER.
3082          B 05716 R 171717 R DZM* (SC.BFN)   /(RKB-106) CLEAR OUT FILE NAME
3083          B 05717 R 171720 R DZM* (SC.BFN+1) /(RKB-106)
3084          B 05720 R 211721 R LAC (020124)    /(RKB-106) DEFAULT EXTENSION, .SIXBT 'BAT'
3085          B 05721 R 071722 R DAC* (SC.BFXT)  /(RKB-106)
3086          B 05722 R 171723 R DZM* (SC.BUNT)  /(RKB-106) ASSUME UNIT NUMBER ZERO
3087          B 05723 R 231523 R LAC* (SC.UIC)   /(RKB-106) DEFAULT UIC IS CURRENT LOGGED IN ONE
3088          B 05724 R 071724 R DAC* (SC.BUIC)  /(RKB-106)
3089          /
3090          / (RKB-106) .SCOMS ARE NOW INITIALIZED, START DECODING COMMAND.
3091          / (RKB-106) SYNTAX IS: 'BATCH] DV[V]U] [[<UIC>] FILNAM [EXT]]
3092          /
3093          05725 R 106147 R JMS KLPESH        /(RKB-106) GET FIELD ROUTINE
3094          B 05726 R 211725 R LAC (BTMP)      /(RKB-106) ARG TO 'CHNSIX'
3095          05727 R 107315 R JMS CHNSIX        /(RKB-106) CHANGE DEVICE [UNIT] TO .SIXBT
3096          05730 R 206125 R LAC BTMP          /(RKB-106) DECIDE EXACT FORM OF DEVIC TYPEIN
3097          /                                /(RKB-106) LEGAL ONES ARE: DV, DVU, DVV, DVVU
3098          /                                /(RKB-106) WHERE THE SECOND 'V' IS THE HANDLER
3099          /                                /(RKB-106) VERSION OR 'FLAVOR' LETTER.
3100          B 05731 R 511621 R AND (70)        /(RKB-106) CHECK FOR 'DVU' FIRST

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3101 B 05732 R 551654 R SAD (60) /(RKB-106) BY CHECKING 3RD CHAR FOR NUMBER
3102 05733 R 741000 A SKP /(RKB-106) YES, THATS IT
3103 05734 R 605745 R JMP KLBAT1 /(RKB-106) NO, TRY OTHERS
3104 05735 R 206125 R LAC BTMP /(RKB-106) TYPE 'DVU', RECALL WHOLE THING
3105 B 05736 R 511610 R AND (7) /(RKB-106) EXTRACT UNIT NUMBER
3106 05737 R 660717 A ALSS 17 /(RKB-106) MOVE TO BITS 0-2
3107 B 05740 R 071723 R DAC* (SC.BUNT) /(RKB-106) PUT IT AWAY
3108 05741 R 777700 A LAW 777700 /(RKB-106) DONE WITH UNIT, SO DESTROY IT
3109 05742 R 506125 R AND BTMP /(RKB-106) NOW TREAT 'DVU' AS 'DV'
3110 05743 R 046125 R DAC BTMP /(RKB-106)
3111 05744 R 605760 R JMP KLBAT2 /(RKB-106)
3112 05745 R 206126 R KLBAT1 LAC BTMP+1 /(RKB-106) COULD BE 'DV', 'DVU' OR 'DVUU'
3113 05746 R 741200 A SNA /(RKB-106) CHECK FOR 'DVUU'
3114 05747 R 605760 R JMP KLBAT2 /(RKB-106) NOPE, ITS 'DV' OR 'DVU'
3115 B 05750 R 511726 R AND (707777) /(RKB-106) CHECK FOR NUMBER AND NO EXTRA CRUFT.
3116 B 05751 R 551727 R SAD (600000) /(RKB-106)
3117 05752 R 741000 A SKP /(RKB-106) OK
3118 05753 R 606122 R JMP BCHER /(RKB-106) TYPED 5 OR 6 CHARS OR 3 + NON-NUMERIC FOURTH.
3119 05754 R 206126 R LAC BTMP+1 /(RKB-106) OK, GET BACK UNIT NUMBER
3120 B 05755 R 511730 R AND (070000) /(RKB-106) STRIP OFF JUNK
3121 05756 R 660703 A ALSS 3 /(RKB-106) MOVE TO RIGHT PLACE FOR .SYSLD
3122 B 05757 R 071723 R DAC* (SC.BUNT) /(RKB-106) PUT IT AWAY
3123 /(RKB-106) NOW TREAT 'DVUU' AS 'DVU'
3124 05760 R 206125 R KLBAT2 LAC BTMP /(RKB-106) ONLY CASES LEFT ARE 'DV' OR 'DVU'
3125 B 05761 R 511574 R AND (77) /(RKB-106) THIS GIVES ME THE ANSWER
3126 05762 R 751200 A SNA!CLA /(RKB-106) SKIP IF 'DVU' CASE, AND ZERO AC
3127 05763 R 740030 A IAC /(RKB-106) FOR 'DV' SET AC TO .SIXBT '00A'
3128 05764 R 246125 R XOR BTMP /(RKB-106) ONLY ONE CASE NOW, 'DVU'
3129 /(RKB-106) SINCE I JUST TURNED 'DV' INTO 'DVA'
3130 B 05765 R 551731 R SAD (030401) /(RKB-106) BUT IF IT WAS 'CD', USE 'CDB'
3131 05766 R 740030 A IAC /(RKB-106) BY ADDING ONE
3132 B 05767 R 071716 R DAC* (SC.BDEV) /(RKB-106) ALL DONE
3133 /
3134 /(RKB-106) NOW WE WANT TO DECIDE IF A FILE-ORIENTED
3135 /(RKB-106) NON-FILE ORIENTED DEVICE WAS SPECIFIED.
3136 /(RKB-106) WE DO THIS SIMPLY BY CALLING EVERYTHING
3137 /(RKB-106) BUT 'PR' (PLUS FLAVORS) OR 'CDB' FILE-
3138 /(RKB-106) ORIENTED. NOTE THAT USERS WITH SPECIAL
3139 /(RKB-106) NON-FILE ORIENTED DEVICES FROM WHICH
3140 /(RKB-106) THEY WISH TO BATCH MUST CHANGE THIS ASSUMPTION.
3141 /
3142 B 05770 R 511732 R AND (777700) /(RKB-106) STRIP FLAVOR CHAR
3143 B 05771 R 551733 R SAD (202200) /(RKB-106) IS IT 'PR'
3144 05772 R 745002 A STL!SKP /(RKB-106) YES, SET LINK
3145 B 05773 R 551734 R SAD (030400) /(RKB-106) IS IT 'CD'
3146 05774 R 744002 A STL /(RKB-106) YES, SET LINK
3147 05775 R 750020 A CLA!RAR /(RKB-106) AC = 0 IF FILE-ORIENTED
3148 05776 R 046125 R DAC BTMP /(RKB-106) SAVE FOR LATER
3149 B 05777 R 231716 R LAC* (SC.BDEV) /(RKB-106) NOW WE CHECK TO SEE IF DEVICE EXISTS
3150 06000 R 107504 R JMS FIONO /(RKB-106) ON THIS SYSTEM
3151 06001 R 600345 R JMP KLILLD /(RKB-106) NO SUCH THING
3152 /

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3153      / (RKB-106) DONE WITH DEVICE, NOW DO [[[<UIC>]] FILENAME [EXT]] PART,
3154      / (RKB-106) CHECKING FOR ILLEGAL DELIMITERS, EXTRANEIOUS CHARACTERS
3155      / (RKB-106) AND WHETHER A FILE NAME STUFF IS EVEN LEGAL FOR THIS DEVICE.
3156
3157      06002 R 207675 R      KLBAT3  LAC      KLCHAR      / (RKB-106) DELIMITER FOLLOWING DEVICE
3158      06003 R 106113 R      JMS      BTERM      / (RKB-106) IS IT CR OR ALT?
3159      06004 R 606056 R      JMP      KLBAT6      / (RKB-106) YES, IS THAT LEGAL HERE?
3160      B 06005 R 551575 R      SAD      (40)      / (RKB-106) IS T SPACE?
3161      06006 R 741000 A      SKP      / (RKB-106) GOOD, MEANS MORE FOLLOWS
3162      06007 R 600342 R      JMP      KLWHAT      / (RKB-106) NO, ILLEGAL DELIMITER
3163
3164      /
3165      / (RKB-106) NOW GO LOOKING FOR THE OPTIONAL <UIC>
3166
3166      06010 R 101664 R      KLBAT4  JMS      KLGET      / (RKB-106) GET NEXT CHARACTER
3167      06011 R 047675 R      DAC      KLCHAR      / (RKB-106) SAVE SAS 'LAST CHAR'
3168      B 06012 R 551575 R      SAD      (40)      / (RKB-106) SPACE?
3169      06013 R 606010 R      JMP      KLBAT4      / (RKB-106) YES, WE EAT THESE FOR BREAKFAST
3170      06014 R 106113 R      JMS      BTERM      / (RKB-106) A TERMINATOR, MEANING TRAILING SPACES AFTER DV?
3171      06015 R 606056 R      JMP      KLBAT6      / (RKB-106) YES, NOT EXACTLY GOOD FORM, BUT OK
3172      B 06016 R 551735 R      SAD      (74)      / (RKB-106) '<', UIC INDICATOR?
3173      06017 R 606067 R      JMP      KLBAT7      / (RKB-106) YES, GO DO IT
3174      06020 R 106147 R      KLBAT5  JMS      KLPGSH      / (RKB-106) NOT UIC, GET FIELD AS FILE NAME
3175      B 06021 R 210007 R      LAC      KLCOM      / (RKB-106) ANYTHING THERE?
3176      06022 R 741200 A      SNA      / (RKB-106)
3177      06023 R 600342 R      JMP      KLWHAT      / (RKB-106) NO, ILLEGAL DELIMITER
3178      B 06024 R 211717 R      LAC      (SC.BFNN) / (RKB-106) ARG TO 'CHNSIX'
3179      06025 R 107315 R      JMS      CHNSIX      / (RKB-106) CONVERT FILE NAME TO .SIXBT
3180      06026 R 207675 R      LAC      KLCHAR      / (RKB-106) DELIMITER FOLLOWING FILE NAME
3181      06027 R 106113 R      KLBAT5A JMS      BTERM      / (RKB-106) CR OR ALT?
3182      06030 R 606107 R      JMP      KLBAT8      / (RKB-106) YES, GO MAKE SURE FILE NAME IS OK
3183      B 06031 R 551575 R      SAD      (40)      / (RKB-106) WAS FILE NAME FOLLOWED BY SPACE?
3184      06032 R 741000 A      SKP      / (RKB-106) MAKE WE WANT TO DO OPTIONAL EXTENSION
3185      06033 R 600342 R      JMP      KLWHAT      / (RKB-106) ILLEGAL DELIMITER
3186      06034 R 101664 R      JMS      KLGET      / (RKB-106) MOVE TO NEXT NON-BLANK
3187      06035 R 047675 R      DAC      KLCHAR      / (RKB-106)
3188      06036 R 606027 R      BEXTSW  JMP      KLBAT5A / (RKB-106) NOT ALLOWING [EXT], EXTRANEIOUS CHARACTERS
3189      / (RKB-106) REMOVE ABOVE INSTRUCTION OR PATCH IT TO 'NOP'
3190      / (RKB-106) TO ALLOW OPTION EXTENSION (NOT SUPPORTED).
3191
3191      06037 R 106147 R      JMS      KLPGSH      / (RKB-106) GET EXTENSION
3192      B 06040 R 210007 R      LAC      KLCOM      / (RKB-106) WAS THERE AN EXT. OR JUST BLANKS?
3193      06041 R 741200 A      SNA      / (RKB-106) WE WANT TO IGNORE TRAILING BLANKS
3194      06042 R 606107 R      JMP      KLBAT8      / (RKB-106) EVEN IF EXTENSIONS ARE ENABLED.
3195      B 06043 R 211736 R      LAC      (BTMP+1) / (RKB-106) ARG TO 'CHNSIX'
3196      06044 R 107315 R      JMS      CHNSIX      / (RKB-106) MAKE IT SIXBIT
3197      06045 R 206127 R      LAC      BTMP+2      / (RKB-106) ONLY WANT 3 CHARACTERS
3198      06046 R 740200 A      SZA      / (RKB-106) OK?
3199      06047 R 600342 R      JMP      KLWHAT      / (RKB-106) ILLEGAL EXTENSION
3200      06050 R 206126 R      LAC      BTMP+1      / (RKB-106) MOVE EXTENSION TO RIGHT PLACE
3201      B 06051 R 071722 R      DAC*      (SC.BFXT) / (RKB-106)
3202      06052 R 207675 R      LAC      KLCHAR      / (RKB-106) WHAT FOLLOWED EXTENSION?
3203      06053 R 106113 R      JMS      BTERM      / (RKB-106) CHECK FOR CR OR ALT
3204      06054 R 606107 R      JMP      KLBAT8      / (RKB-106) RIGHT, VALIDATE FILE NAME

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PAGE 93      DOSNRM 109      X/M/DOS NRM $BATCH

3205      06055 R 600342 R      JMP      KLWHAT      /(RKB-106) ILLEGAL DELIMITER
3206      /
3207      /(RKB-106) DONE DECODING COMMAND. NOW VERIFY THAT A FILE
3208      /(RKB-106) NAME WAS NOT TYPED AFTER 'PR' OR 'CD'
3209      /
3210      06056 R 206125 R      KLBAT6 LAC      BTMP      /(RKB-106) NO FILE NAME TYPED
3211      06057 R 741200 A      SNA      /(RKB-106) WAS DEVICE FILE-ORIENTED?
3212      06060 R 600375 R      JMP      BADGET      /(RKB-106) UNFORTUNATELY, YES.
3213      06061 R 777776 A      BCHOK LAW      777776 /(RKB-106) EVERYTHING IS OK, ENTER BATCH MODE
3214      B 06062 R 531526 R      AND*      (SC.NMF)      /(RKB-106)
3215      06063 R 740030 A      IAC      /(RKB-106) AND RESMON WILL DO THE REST
3216      B 06064 R 071526 R      DAC*      (SC.NMF)      /(RKB-106)
3217      .EXIT      /(RKB-106) REBUILD RESMON WITH BATCH IN IT.
      06065 R 000000 A *G      CAL+0
      06066 R 000015 A *G      15

3218      /
3219      /(RKB-106) PROCESS THE UIC SPECIFICATION
3220      /
3221      06067 R 206125 R      KLBAT7 LAC      BTMP      /(RKB-106) UIC TYPED IN IS THIS LEGAL?
3222      06070 R 740200 A      SZA      /(RKB-106)
3223      06071 R 600342 R      JMP      KLWHAT      /(RKB-106) NOT FOR 'PR' OR 'CD'
3224      06072 R 107067 R      JMS      FETUIC      /(RKB-106) GET REST OF UIC
3225      B 06073 R 071724 R      DAC*      (SC.BUIC)      /(RKB-106) AND PUT IT AWAY
3226      06074 R 101664 R      JMS      KLGET      /(RKB-106) GET NEXT CHAR
3227      B 06075 R 551737 R      SAD      (76)      /(RKB-106) IS IT A '>'
3228      06076 R 741000 A      SKP      /(RKB-106) HOPE SO
3229      06077 R 600372 R      JMP      FETUER      /(RKB-106) ERROR
3230      06100 R 101664 R      JMS      KLGET      /(RKB-106) GET NEXT
3231      06101 R 047675 R      DAC      KLCHAR      /(RKB-106) SAVE IT
3232      06102 R 106113 R      JMS      BTERM      /(RKB-106) CR OR ALT?
3233      06103 R 600375 R      JMP      BADGET      /(RKB-106) YES, THIS IS BAD NEWS
3234      B 06104 R 551575 R      SAD      (40)      /(RKB-106) SPACE?
3235      06105 R 606020 R      JMP      KLBAT5      /(RKB-106) THAT'S GOOD, BECAUSE A FILENAME IS REQUIRED
3236      06106 R 600342 R      JMP      KLWHAT      /(RKB-106) ILLEGAL DELIMITER
3237      /
3238      /(RKB-106) A FILE ANME WAS FOUND, MAKE SURE DEVICE
3239      /(RKB-106) IS FILE ORIENTED.
3240      /
3241      06107 R 206125 R      KLBAT8 LAC      BTMP      /(RKB-106) GET FLAG
3242      06110 R 740200 A      SZA      /(RKB-106)
3243      06111 R 600342 R      JMP      KLWHAT      /(RKB-106) FILE NAME ON 'CD' OR 'PR' IS NOT GOOD
3244      06112 R 606061 R      JMP      BCHOK      /(RKB-106) OK, ENTER BATCH MODE
3245      /
3246      /(RKB-106) ROUTINE TO TEST AC FOR CR OR ALT
3247      /(RKB-106) CALLING SEQUENCE:
3248      /(RKB-106) (CHAR IS IN AC, BITS 11-17)
3249      /(RKB-106) JMS      BTERM
3250      /(RKB-106) (RETURN IF IS 15 OR 175)
3251      /(RKB-106) (RETURN OTHERWISE)
3252      /
3253      06113 R 740040 A      BTERM XX      /(RKB-106)
3254      B 06114 R 551577 R      SAD      (15)      /(RKB-106) CR?

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3255		06115 R 626113 R		JMP*	BTERM	/(RKB-106) YES
3256	B	06116 R 551576 R		SAD	(175)	/(RKB-106) ALT MODE?
3257		06117 R 626113 R		JMP*	BTERM	/(RKB-106) YES
3258		06120 R 446113 R		ISZ	BTERM	/(RKB-106) NEITHER, TAKE SECOND RETURN
3259		06121 R 626113 R		JMP*	BTERM	/(RKB-106)
3260			/			
3261			/			
3262			/			AN UNRECOGNIZED BATCH DEVICE WAS SPECIFIED.
3263		06122 R 100460 R	BCHER	JMS	PRERR	/(GAR:095)
3264		06123 R 001344 R		ARG	KLBUFG-2	/(GAR:095) ERROR: BAD BATCH DEVICE.
3265		06124 R 600276 R		JMP	FLUSH	/(GAR:095)(RKB-106)
3266		06125 R A	BTMP	.BLOCK	3	/(RKB-106)

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3267                                     .TITLE X/M/DOS NRM      $CHANNEL
3268                                     /
3269                                     /$CHANNEL 7/9 PROCESSOR
3270                                     /
3271      06130 R 106147 R      KL70R9  JMS KLPESH      /GET 7/9
3272      B 06131 R 210007 R      LAC KLCOM
3273      06132 R 547745 R      SAD MT7      /7 CHANNEL
3274      06133 R 606137 R      JMP KL7C
3275      06134 R 547746 R      SAD MT9      /9 CHANNEL
3276      06135 R 606140 R      JMP KL9C
3277      06136 R 600417 R      JMP BADCHN      /ILLEGAL COMMAND
3278      06137 R 751000 A      KL7C  SKP!CLA      /CLEAR FOR 7
3279      B 06140 R 211543 R      KL9C  LAC (4000      /SET FOR 9
3280      06141 R 047721 R      DAC SWI
3281      06142 R 773777 A      LAW 13777
3282      B 06143 R 531517 R      AND*      (104
3283      06144 R 247721 R      XOR      SWI
3284      B 06145 R 071517 R      DAC*      (104
3285      06146 R 600320 R      JMP      KLOK

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3286                                     .TITLE X/M/DOS NRM PROGRAM NAME SEARCH ROUTINE
3287                                     /
3288                                     /
3289                                     / PROGRAM NAME SEARCH ROUTINE
3290                                     /
3291      06147 R 000000 A      KLPGSH 0
3292      B 06150 R 150007 R      DZM KLCOM      /CLEAR PROG NAME
3293      B 06151 R 150010 R      DZM KLCOM+1
3294      B 06152 R 150011 R      DZM KLCOM+2
3295      B 06153 R 150012 R      DZM KLCOM+3
3296      B 06154 R 211625 R      LAC (KLCOM      /SETUP POINTERS
3297      06155 R 047703 R      DAC KLPUTP
3298      06156 R 147711 R      DZM KL57
3299      06157 R 207675 R      LAC KLCHAR      /LAST CHAR
3300      B 06160 R 551575 R      KLP1  SAD (40
3301      06161 R 741000 A      SKP      /IGNORE
3302      B 06162 R 551566 R      SAD (12
3303      06163 R 741000 A      SKP      /IGNORE
3304      06164 R 606167 R      JMP KLRXT
3305      06165 R 101664 R      JMS KLGET      /GET NEXT CHARACTER
3306      06166 R 606160 R      JMP KLP1
3307      B 06167 R 551575 R      KLRXT  SAD (40
3308      06170 R 606203 R      JMP KLPGOT      /PROCESS
3309      B 06171 R 551577 R      SAD (15
3310      06172 R 606203 R      JMP KLPGOT      /PROCESS
3311      B 06173 R 551576 R      SAD (175
3312      06174 R 606200 R      JMP KLPGOT-3      /RETURN & PROCESS
3313      06175 R 101714 R      JMS KLPUT
3314      06176 R 101664 R      JMS KLGET
3315      06177 R 606167 R      JMP KLRXT
3316      06200 R 000775 A      CAL+775
3317      06201 R 000006 A      6
3318      B 06202 R 211576 R      LAC (175
3319      06203 R 047675 R      KLPGOT  DAC KLCHAR
3320      06204 R 626147 R      JMP* KLPGSH      /RETURN

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3321          .TITLE XLM/DOS NRM      $GET, $GETP, $GETT, $GETS
3322          /
3323          /$GET, $GETP, $GETT, $GETS COMMAND PROCESSOR
3324          /
3325          006205 R
3326      B    06205 R 211740 R      LAC (2004)      / SET RETURN CODE AND NO FILE /EAG:101
3327          06206 R 606214 R      JMP      GETPTS
3328          006207 R
3329      B    06207 R 211741 R      LAC (2001)      / SET RETURN CODE AND NO FILE /EAG:101
3330          06210 R 606214 R      JMP      GETPTS
3331          006211 R
3332      B    06211 R 211742 R      LAC (2002)      / SET RETURN CODE AND NO FILE /EAG:101
3333          06212 R 606214 R      JMP      GETPTS
3334          006213 R
3335      B    06213 R 211743 R      LAC (2003)      / SET RETURN CODE AND NO FILE /EAG:101
3336          006214 R
3337          06214 R 046250 R      GETPTS=.      DAC      GET      /SAVE FOR LATER USE (BR-094)
3338          06215 R 207675 R      LAC      KLCHAR
3339      B    06216 R 551577 R      SAD      (15
3340          06217 R 606250 R      JMP      GET
3341      B    06220 R 551576 R      SAD      (175
3342          06221 R 606250 R      JMP      GET
3343          06222 R 106147 R      JMS      KLPGSH      /GET FILE NAME
3344      B    06223 R 210007 R      LAC      KLCOM      /WAS ONE TYPED IN?
3345          06224 R 741200 A      SNA
3346          06225 R 606250 R      JMP      GET      /NO
3347      B    06226 R 211516 R      LAC      (.SCOM+7) /YES
3348          06227 R 107315 R      JMS      CHNSIX
3349          06230 R 207675 R      LAC      KLCHAR      /WAS EXTENSION TYPED?
3350      B    06231 R 551577 R      SAD      (15
3351          06232 R 600375 R      JMP      BADGET      /NO
3352      B    06233 R 551576 R      SAD      (175
3353          06234 R 600375 R      JMP      BADGET      /NO
3354          06235 R 106147 R      JMS      KLPGSH      /YES, GET IT
3355      B    06236 R 210007 R      LAC      KLCOM
3356          06237 R 741200 A      SNA
3357          06240 R 600375 R      JMP      BADGET
3358      B    06241 R 211744 R      LAC      (GETC
3359          06242 R 107315 R      JMS      CHNSIX
3360          06243 R 206253 R      LAC      GETC
3361      B    06244 R 071745 R      DAC*      (.SCOM+11
3362          06245 R 775777 A      LAW 775777      / CLEAR NO FILENAME BIT      /EAG:101
3363          06246 R 506250 R      AND GET      /EAG:101
3364          06247 R 046250 R      DAC GET      /EAG:101
3365          06250 R      GET      .GET 0, .SCOM+7      /EAG:101
3366          06250 R 000000 A *G      CAL+0&3407
3367          06251 R 000025 A *G      25
3368          06252 R 000107 A *G      .SCOM+7+0
3366          06253 R 000000 A      GETC      0      /EXTENSION STORAGE (BR-094)

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3369          .TITLE X/M/DOS NRM      $PUT
3370          /
3371          /$PUT COMMAND PROCESSOR
3372          /
3373          KLGPBUT=.
3374          006254 R 207675 R          LAC      KLCHAR      /WAS FILE NAME TYPED?
3375          B 06255 R 551577 R          SAD      (15
3376          06256 R 600375 R          JMP      BADGET      /NO
3377          B 06257 R 551576 R          SAD      (175
3378          06260 R 600375 R          JMP      BADGET      /NO
3379          06261 R 106147 R          JMS      KLPGSH      /MAYBE. TRY TO GET IT
3380          B 06262 R 210007 R          LAC      KLCOM      /WAS IT REALLY TYPED IN?
3381          06263 R 741200 A          SNA
3382          06264 R 600375 R          JMP      BADGET      /NO
3383          B 06265 R 211516 R          LAC      (.SCOM+7
3384          06266 R 107315 R          JMS      CHNSIX
3385          06267 R 207675 R          LAC      KLCHAR      /WAS EXTENSION TYPED?
3386          B 06270 R 551577 R          SAD      (15
3387          06271 R 600375 R          JMP      BADGET      /NO
3388          B 06272 R 551576 R          SAD      (175
3389          06273 R 600375 R          JMP      BADGET      /NO
3390          06274 R 106147 R          JMS      KLPGSH      /MAYBE
3391          B 06275 R 210007 R          LAC      KLCOM
3392          06276 R 741200 A          SNA
3393          06277 R 600375 R          JMP      BADGET      /NO
3394          B 06300 R 211744 R          LAC      (GETC
3395          06301 R 107315 R          JMS      CHNSIX
3396          06302 R 206253 R          LAC      GETC
3397          B 06303 R 071745 R          DAC*      (.SCOM+11      /YES
3398          .GET 1400,.SCOM+7      /EAG:101
          06304 R 001400 A *G      CAL+1400&3407
          06305 R 000025 A *G      25
          06306 R 000107 A *G      .SCOM+7+0

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3399          .TITLE XVM/DOS NRM          $ASSIGN
3400          /$ASSIGN COMMAND ROUTINE WHICH SETS
3401          / UP.DAT SLOTS WITH DEVICE HANDLER
3402          / NUMBERS ACCORDING TO THE CALLING
3403          / SEQUENCE: DEV <N> O.-P.Q / (OR CR)
3404      B      06307 R 150007 R      KLASI DZM KLCOM          /CLEAR OUT COMMAND AREA
3405          06310 R 777775 A      LEADSP LAW          -3
3406          06311 R 047711 R      DAC          KL57
3407      B      06312 R 211746 R      LAC          (SKP          /ASSUME .DAT SLOT MODIFICATION
3408          06313 R 046557 R      DAC          SKPDAT
3409      B      06314 R 211565 R      LAC          (NOP          /ASSUME NO .UFD MODIFICATION
3410          06315 R 046560 R      DAC          SKPUIC
3411          06316 R 101664 R      ASGNXT JMS          KLGET
3412          06317 R 447711 R      ISZ          KL57
3413          06320 R 745000 A      SKP!CLL
3414          06321 R 744002 A      STL
3415      B      06322 R 551575 R      SAD          (40
3416          06323 R 606346 R      JMP          ASTS40
3417      B      06324 R 551577 R      SAD          (15
3418          06325 R 600320 R      JMP          KLOK
3419      B      06326 R 551576 R      SAD          (175
3420          06327 R 600320 R      JMP          KLOKLF
3421      B      06330 R 551735 R      SAD          (74          //
3422          06331 R 606561 R      JMP          ASTU1          /ONLY MODIFY UIC
3423      B      06332 R 511574 R      AND          (77
3424          06333 R 047675 R      DAC          KLCHAR
3425      B      06334 R 511621 R      AND          (70
3426      B      06335 R 551654 R      SAD          (60
3427          06336 R 606374 R      JMP          ASPRUN /DELIMITED BY UNIT #
3428          06337 R 207675 R      LAC          KLCHAR
3429      B      06340 R 250007 R      XOR          KLCOM /MERGE INTO .SIXBT
3430          06341 R 741400 A      SZL
3431          06342 R 606353 R      JMP          FULWD /3 CHAR. ARE ENOUGH TO DELIMIT HANDLER
3432          06343 R 107747 R      JMS          LSHFT6 /MOVE OVER FOR NEXT CHAR
3433      B      06344 R 050007 R      DAC          KLCOM
3434          06345 R 606316 R      JMP          ASGNXT
3435      B      06346 R 210007 R      ASTS40 LAC          KLCOM /DELIMITED BY SPACE?
3436          06347 R 741200 A      SNA
3437          06350 R 606310 R      JMP          LEADSP /IGNORE LEADING SPACES
3438          06351 R 147675 R      ASTD41 DZM          KLCHAR /UNIT # DEFAULT 0
3439          06352 R 606401 R      JMP          ASGUNT
3440      B      06353 R 050007 R      FULWD DAC          KLCOM
3441          06354 R 547741 R      SAD          KLNONE /NON?
3442          06355 R 606367 R      JMP          FULWD1 /YES: IGNORE POSSIBLE TRAILING "E"
3443          06356 R 101664 R      JMS          KLGET
3444          06357 R 047675 R      DAC          KLCHAR
3445          06360 R 106602 R      JMS          STUIC2 //
3446      B      06361 R 551575 R      SAD          (40
3447          06362 R 606351 R      JMP          ASTD41
3448      B      06363 R 511747 R      AND          (170 /UNIT #?
3449      B      06364 R 551654 R      SAD          (60
3450          06365 R 606374 R      JMP          ASPRUN /YES

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3451		06366 R 600345 R	JMP	KLILLD	/NO; ILLEGAL CONSTRUCTION
3452		06367 R 101664 R	JMS	KLGET	
3453		06370 R 147675 R	DZM	KLCHAR	
3454		06371 R 106602 R	JMS	STUIC2	/C
3455	B	06372 R 551575 R	SAD	(40	
3456		06373 R 741000 A	SKP		
3457		06374 R 101664 R	ASPRUN	JMS	KLGET
3458		06375 R 106602 R	JMS	STUIC2	/C
3459	B	06376 R 551575 R	SAD	(40	
3460		06377 R 741000 A	SKP		
3461		06400 R 600350 R	JMP	KLBADU	
3462	B	06401 R 210007 R	LAC	KLCOM	/A HANDLER BY DEFAULT
3463	B	06402 R 511574 R	AND	(77	
3464		06403 R 741200 A	SNA		
3465	B	06404 R 450007 R	ISZ	KLCOM	
3466	B	06405 R 210007 R	LAC	KLCOM	/(GAR:098) FIND NUMBER OF DEVICE HANDLER.
3467		06406 R 107504 R	JMS	FIONO	
3468		06407 R 600345 R	JMP	KLILLD	/ILLEGAL DEVICE
3469		06410 R 741200 A	SNA		
3470		06411 R 606417 R	JMP	PRNXDT-1	/NO DEVICE
3471		06412 R 207675 R	LAC	KLCHAR	/(GAR:098)
3472		06413 R 742020 A	RTR		
3473		06414 R 742020 A	RTR		
3474	B	06415 R 511573 R	AND	(700000	/UNIT NO. OR ZERO
3475		06416 R 247545 R	XOR	HANNO	
3476		06417 R 047712 R	DAC	KLDEV/C	/UNIT + DEV CODE
3477		06420 R 147714 R	PRNXDT	DZM	KLSDGN
3478		06421 R 147713 R	DZM	KLDATD	
3479		06422 R 101664 R	KLNASI	JMS	KLGET
3480		06423 R 047675 R	DAC	KLCHAR	
3481		06424 R 106602 R	JMS	STUIC2	/C
3482	B	06425 R 551575 R	SAD	(40	
3483		06426 R 606422 R	JMP	KLNASI	/IGNORE SPACE
3484	B	06427 R 551667 R	SAD	(57	
3485		06430 R 606467 R	JMP	PRDAT	/SLASH
3486	B	06431 R 551577 R	SAD	(15	
3487		06432 R 606467 R	JMP	PRDAT	/CARRIAGE RETURN
3488	B	06433 R 551576 R	SAD	(175	
3489		06434 R 606467 R	JMP	PRDAT	/ALT MODE
3490	B	06435 R 551750 R	SAD	(53	
3491		06436 R 606422 R	JMP	KLNASI	/PLUS SIGN-IGNORED
3492	B	06437 R 551751 R	SAD	(54	
3493		06440 R 606467 R	JMP	PRDAT	/COMMA
3494	B	06441 R 551752 R	SAD	(55	
3495		06442 R 606461 R	JMP	KLMIN	/MINUS SIGN
3496		06443 R 207675 R	LAC	KLCHAR	
3497	B	06444 R 511747 R	AND	(170	
3498	B	06445 R 551654 R	SAD	(60	/TEST FOR LEGAL DIGIT
3499		06446 R 741000 A	SKP		
3500		06447 R 600361 R	JMP	KLBDAT	/ILLEGAL DIGIT
3501		06450 R 207675 R	LAC	KLCHAR	
3502	B	06451 R 511610 R	AND	(7	



PAGE	101	DOSNRM	109	X/M/DOS	NRM	\$ASSIGN
3503		06452	R	047675	R	DAC KLCHAR /SAVE OCTAL
3504		06453	R	207713	R	LAC KLDATD
3505		06454	R	744010	A	RAL!CLL
3506		06455	R	742010	A	RTL
3507		06456	R	247675	R	XOR KLCHAR /COMBINE DIGITS
3508		06457	R	047713	R	DAC KLDATD
3509		06460	R	606422	R	JMP KLNASI
3510		06461	R	207713	R	KLMIN LAC KLDATD
3511		06462	R	740200	A	SZA
3512		06463	R	600361	R	JMP KLB DAT
3513		06464	R	750001	A	CLA!CMA
3514		06465	R	047714	R	DAC KLSIGN /NEGATIVE SIGN
3515		06466	R	606422	R	JMP KLNASI /NEXT CHARACTER
3516		06467	R	207714	R	PRDAT LAC KLSIGN /SIGN
3517		06470	R	751201	A	SNA!CLA!CMA
3518		06471	R	606505	R	JMP KLPOSD /POSITIVE
3519		06472	R	347713	R	TAD KLDATD
3520		06473	R	740001	A	CMA
3521		06474	R	047713	R	DAC KLDATD
3522		06475	R	406557	R	XCT SKPDAT /ONLY LIST ERROR FOR ILLEGAL .DAT SLOTS
3523		06476	R	606505	R	JMP KLPOSD /IF .DAT SLOTS ARE TO BE MODIFIED
3524	B	06477	R	551753	R	SAD (-7
3525		06500	R	600364	R	JMP KLNMOD /.DAT-7
3526	B	06501	R	551704	R	SAD (-3
3527		06502	R	600364	R	JMP KLNMOD /.DAT-3
3528	B	06503	R	551703	R	SAD (-2
3529		06504	R	600364	R	JMP KLNMOD /.DAT-2
3530		06505	R	207713	R	KLPOSD LAC KLDATD /FETCH .DAT SLOT #
3531	B	06506	R	551754	R	SAD (5 /IT IS ILLEGAL TO CHANGE .DAT'S 5 AND 6
3532		06507	R	741000	A	SKP /IN BOSS MODE
3533	B	06510	R	551755	R	SAD (6
3534		06511	R	741000	A	SKP
3535		06512	R	606516	R	JMP .+4
3536	B	06513	R	231531	R	LAC* (152 /5 OR 6, CHECK FOR BOSS MODE
3537		06514	R	741100	A	SPA /NOT BOSS MODE
3538		06515	R	600364	R	JMP KLNMOD /BOSS MODE, PRINT ERROR MESSAGE
3539		06516	R	207713	R	LAC KLDATD
3540		06517	R	347667	R	TAD .DATAD /-LARGEST POSITIVE .DAT SLOT -1
3541		06520	R	740300	A	SMA!SZA
3542		06521	R	600361	R	JMP KLB DAT /OUT OF RANGE
3543	B	06522	R	211577	R	LAC (15 /-SMALLEST .DAT SLOT
3544		06523	R	347713	R	TAD KLDATD
3545		06524	R	741100	A	SPA
3546		06525	R	600361	R	JMP KLB DAT /OUT OF RANGE
3547		06526	R	207713	R	LAC KLDATD
3548	B	06527	R	511756	R	AND (777
3549		06530	R	046544	R	DAC UICDAT /SET UP .DAT SLOT FOR .USER CAL
3550		06531	R	406557	R	XCT SKPDAT /ARE WE MODIFYING .DAT SLOT
3551		06532	R	606542	R	JMP UICS1 /NO
3552		06533	R	741200	A	SNA
3553		06534	R	600361	R	JMP KLB DAT /MAY NOT MODIFY .DAT 0
3554		06535	R	207713	R	LAC KLDATD

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PAGE 102      DOSNRM 109      XLM/DOS NRM      $ASSIGN
3555      B      06536 R 371515 R      TAD*      123      /COMPUTE .DAT SLOT ADDRESS
3556      06537 R 046750 R      DAC      CT1
3557      06540 R 207712 R      LAC      KLDEVIC      /PUT IN NEW CONTENTS
3558      06541 R 066750 R      DAC*      CT1
3559      06542 R 406560 R      UICS1      XCT      SKPUIC      /UIC TO BE CHANGED?
3560      06543 R 606547 R      JMP      UICS2      /NO
3561      06544 R 740040 A      UICDAT      XX      /USER CAL
3562      06545 R 000023 A      23
3563      06546 R 740040 A      ASTU2      XX      /SIXBT 'UIC'
3564      06547 R 207675 R      UICS2      LAC      KLCHAR
3565      B      06550 R 551577 R      SAD      (15      /CR
3566      06551 R 600320 R      JMP      KLOK
3567      B      06552 R 551576 R      SAD      (175      /ALT-MODE
3568      06553 R 600320 R      JMP      KLOKLF
3569      B      06554 R 551667 R      SAD      (57      /SLASH
3570      06555 R 606307 R      JMP      KLASI
3571      06556 R 606420 R      JMP      PRNXDT      /MUST HAVE BEEN COMMA
3572      /CODE TO FETCH A UIC WHEN .DAT SLOT IS TO BE UNTOUCHED
3573      /
3574      06557 R 740040 A      SKPDAT      XX
3575      06560 R 740040 A      SKPUIC      XX      /SKIP IF UIC IS TO BE MODIFIED
3576      06561 R 777776 A      ASTU1      LAW      -2      /MUST BE FIRST CHARACTER
3577      06562 R 547711 R      SAD      KL57
3578      06563 R 741000 A      SKP
3579      06564 R 600372 R      JMP      FETUER      /UIC ERROR
3580      06565 R 107067 R      JMS      FETUIC      /FETCH EXACTLY 3 CHARACTERS
3581      06566 R 046546 R      DAC      ASTU2      /USER CAL
3582      06567 R 101664 R      JMS      KLGET
3583      B      06570 R 551575 R      SAD      (40      /SPACE
3584      06571 R 606567 R      JMP      -2      /IGNORE TRAILING SPACES
3585      B      06572 R 551737 R      SAD      (76      /
3586      06573 R 741000 A      SKP
3587      06574 R 600372 R      JMP      FETUER      /MUST BE BRACKETED BY PARENTHESIS
3588      B      06575 R 211746 R      LAC      (SKP      /CHANGE UIC
3589      06576 R 046560 R      DAC      SKPUIC
3590      B      06577 R 211565 R      LAC      (NOP      /DO NOT CHANGE .DAT SLOT
3591      06600 R 046557 R      DAC      SKPDAT
3592      06601 R 606420 R      JMP      PRNXDT
3593      /
3594      /ROUTINE TO FETCH A UIC AND CHECK FOR (.)
3595      /      JMS      STUIC2
3596      /      WITH CHARACTER IN AC AND IMMEDIATE EXIT IF NOT (.)
3597      /
3598      06602 R 000000 A      STUIC2      0
3599      B      06603 R 551735 R      SAD      (74      /IS THIS A UIC?
3600      06604 R 741000 A      SKP
3601      06605 R 626602 R      JMP*      STUIC2      /NO
3602      06606 R 406560 R      XCT      SKPUIC      /HAS ANOTHER UIC BEEN INPUT
3603      06607 R 741000 A      SKP
3604      06610 R 600372 R      JMP      FETUER      /YES ERROR
3605      B      06611 R 211746 R      LAC      (SKP      /SET FLAG TO MODIFY UIC
3606      06612 R 046560 R      DAC      SKPUIC

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PAGE	103	DOSNRM	109	X/M/DOS	NRM	\$ASSIGN		
3607		06613	R	107067	R	JMS	FETUIC	/FETCH EXACTLY 3 CHARACTERS
3608		06614	R	046546	R	DAC	ASTU2	/DEPOSIT IN .USER CAL
3609		06615	R	101664	R	JMS	KLGET	/IGNORE TRAILING SPACES
3610	B	06616	R	551575	R	SAD	(40	
3611		06617	R	606615	R	JMP	.-2	
3612	B	06620	R	551737	R	SAD	(76	/MUST BE ENCLOSED WITHIN PARENTHESIS
3613		06621	R	741000	A	SKP		
3614		06622	R	600372	R	JMP	FETUER	
3615	B	06623	R	211575	R	LAC	(40	
3616		06624	R	626602	R	JMP*	STUIC2	/EXIT WITH SPACE AS DELIMITER

					.TITLE X/M/DOS NRM	\$BUFFS
					COMMAND PROCESSOR	
3617						
3618						
3619						
3620		06625 R	101664 R	KLNBUF	JMS KLGET	/FETCH #
3621	B	06626 R	551575 R		SAD (40	/IGNORE SPACES
3622		06627 R	606625 R		JMP .-2	
3623	B	06630 R	150007 R		DZM KLCOM	/DEFAULT # 0
3624		06631 R	741000 A		SKP	
3625		06632 R	101664 R	FIL1	JMS KLGET	
3626	B	06633 R	551577 R		SAD (15	/CR
3627		06634 R	606653 R		JMP FIL2	
3628	B	06635 R	551576 R		SAD (175	/ALT MODE
3629		06636 R	606653 R		JMP FIL2	
3630	B	06637 R	551575 R		SAD (40	/SPACE
3631		06640 R	606653 R		JMP FIL2	
3632		06641 R	723720 A		AAC -60	
3633		06642 R	047675 R		DAC KLCHAR	
3634		06643 R	107761 R		JMS DGITCK	
3635	B	06644 R	210007 R		LAC KLCOM	
3636		06645 R	673122 A		MULISHAL	
3637		06646 R	000012 A		12	
3638		06647 R	641002 A		LACQ	
3639		06650 R	347675 R		TAD KLCHAR	
3640	B	06651 R	050007 R		DAC KLCOM	
3641		06652 R	606632 R		JMP FIL1	/GO BACK FOR MORE
3642						/EAG:101
3643						/EAG:101
3644	B	06653 R	231526 R	FIL2	LAC* (SC.NMF)	/EAG:101
3645	B	06654 R	511552 R		AND (1)	/EAG:101
3646	B	06655 R	350007 R		TAD KLCOM	/EAG:101
3647	B	06656 R	071757 R		DAC* (.SCOM+26)	/EAG:101
3648		06657 R	600320 R		JMP KLOK	/EAG:101

/ CHECK IF WE ARE IN EITHER  
/ BOSS OR BATCH MODE, AND IF  
/ WE ARE INCREASE THE NUMBER  
/ OF BUFFERS BY ONE.

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3649 .TITLE XIM/DOS NRM $LOGOUT
3650 /$LOGOUT COMMAND PROCESSOR
3651 /
3652 B 00660 R 211760 R KLNLOT LAC (230322 /REPLACE UIC WITH 'SCR'
3653 /
3654 /RESTOR: SUBROUTINE TO RESTORE ALL SYSTEM DEFAULTS.
3655 /
3656 / ON ENTRY: AC = UIC TO BE PUT IN .SCOM+41.
3657 /
3658 B 00661 R 071523 R RESTOR DAC* (.SCOM+41 /NEW UIC.
3659 B 00662 R 231526 R LAC* (.SCOM+42 /TURN EVERYTHING OFF (BR-094)
3660 B 00663 R 511761 R AND (000355 /EXCEPT HDW PRESENT BITS (BR-094)
3661 /
3662 B 00664 R 071526 R DAC* (.SCOM+42 /((GAR:095) AND BOSS AND BATCHING BITS.
3663 B 00665 R 231531 R LAC* (.SCOM+52 /AND SAVE (BR-094)
3664 00666 R 740100 A SMA
3665 B 00667 R 171554 R DZM* (.SCOM+56 /TURN OFF TIME ESTIMATE.
3666 B 00670 R 217113 A LAC PROTCT /RESET DEFAULT FILE PROTECTION CODE
3667 B 00671 R 071657 R DAC* (.SCOM+54
3668 B 00672 R 217105 A LAC SCOM4 /RESTORE SYSTEM DEFAULT CONFIG.
3669 B 00673 R 071517 R DAC* (.SCOM+4
3670 B 00674 R 217106 A LAC SCOM20
3671 B 00675 R 071706 R DAC* (.SCOM+20
3672 B 00676 R 217112 A LAC SCOM33 /VT15 DEFAULTS
3673 B 00677 R 271702 R XOR* (.SCOM+33
3674 B 00670 R 511762 R AND (500000
3675 006701 R 741200 A SNA
3676 006702 R 606706 R JMP .+4
3677 B 006703 R 271702 R XOR* (.SCOM+33
3678 B 006704 R 511535 R AND (577777
3679 B 006705 R 071702 R DAC* (.SCOM+33
3680 B 006706 R 217110 A LAC FILES /DEFAULT # BUFFERS
3681 B 006707 R 071757 R DAC* (.SCOM+26
3682 006710 R 107461 R JMS SETMD /ASK FOR MODE TYPEOUT (BR-092)
3683 006711 R 607663 R JMP NRM.2 /EXIT FROM DOSNRM WITHOUT SETTING .SCOM BITS

```

```

3684 .TITLE M/DOS NRM $LOGIN
3685
3686 /$LOGIN COMMAND PROCESSOR
3687
3688 06712 R 000000 A LOGFLG 0
3689 006713 R KLNLIN=
3690 B 06713 R 231526 R LAC* (142 /TURN OFF MIC LOGGED-IN BIT
3691 B 06714 R 511763 R AND (377777
3692 B 06715 R 071526 R DAC* (142
3693 06716 R 446712 R ISZ LOGFLG
3694 06717 R 107067 R JMS FETUIC /GET CODE
3695 06720 R 146712 R DZM LOGFLG
3696 B 06721 R 551524 R SAD (233123 / 'SYS' IS ILLEGAL
3697 06722 R 600372 R JMP FETUER
3698 B 06723 R 551522 R SAD (021613 / 'BNK' IS ILLEGAL
3699 06724 R 600372 R JMP FETUER
3700 B 06725 R 551764 R SAD (200107 / 'PAG' IS ILLEGAL
3701 06726 R 600372 R JMP FETUER
3702 B 06727 R 551765 R SAD (111723 / 'IOS' IS ILLEGAL
3703 06730 R 600372 R JMP FETUER
3704 06731 R 606661 R JMP RESTOR /RESET SYSTEM DEFAULTS.

```

```

3705                                     .TITLE X/M/DOS NRM $MICLOG
3706                                     /
3707                                     /$MICLOG COMMAND PROCESSOR
3708                                     /
3709                                     /KLNMIC=.
3710                                     ISZ     LOGFLG
3711                                     JMS     FETUIC      / GET CODE
3712                                     DZM     LOGFLG
3713     B   06735 R 557111 A             SAD     MIC      / IS IT MIC?
3714                                     SKP
3715                                     JMP     KLNLOT      / YES
3716     B   06740 R 231526 R             LAC*    (142      / NO, FAKE $LOGOUT
3717     B   06741 R 511763 R             AND     (377777   / SET MIC BIT IN .SCOM
3718     B   06742 R 251701 R             XOR     (400000
3719     B   06743 R 071526 R             DAC*    (142
3720     B   06744 R 211524 R             LAC     (233123   / FAKE LOGIN 'SYS'
3721     B   06745 R 071523 R             DAC*    (141
3722                                     JMS     UFDUPD      / SET UP .UFD TABLE
3723                                     JMP     KLOK

```

```

3724                                     .TITLE XMM/DOS NRM      SET UP .UFD AND .DAT TABLES
3725                                     /
3726                                     /ROUTINE TO SET UP THE .UFD TABLE
3727                                     /
3728      06750 R 000000 A      CT1      0
3729      06751 R 000000 A      UFDUPD   0
3730      06752 R 777762 A      LAW       -16      /COMPUTE TRANSFER VECTOR TO FIRST ENTRY
3731      B 06753 R 371525 R      TAD*      (125
3732      B 06754 R 071766 R      DAC*      (13      /COMPENSATION MADE FOR PREINDEXING
3733      B 06755 R 217102 A      LAC NODAT
3734      06756 R 744020 A      CLLIRAR      /GET SIZE OF .DAT
3735      B 06757 R 357101 A      TAD NOPAR      /ADD # OF PAR. IN SGNBLK
3736      06760 R 347734 R      TAD .SGNBLK      /GET ADDRESS OF .UFD IN SGNBLK
3737      B 06761 R 071612 R      DAC* (14      /COMPENSATION MADE FOR PREINDEXING
3738      06762 R 777772 A      LAW       -6      /FIRST SIX .DAT SLOTS GET UIC
3739      06763 R 046750 R      DAC      CT1
3740      06764 R 107015 R      JMS UFDUP1
3741      06765 R 446750 R      ISZ      CT1
3742      06766 R 606764 R      JMP      .-2
3743      B 06767 R 231531 R      LAC*      (152      / .DAT -7 GETS MIC IF NOT IN BOSS MODE
3744      06770 R 750100 A      CLAISMA      /AND CTP IF IN BOSS MODE
3745      B 06771 R 211767 R      LAC      (200503
3746      B 06772 R 351770 R      TAD      (032420
3747      06773 R 060013 A      DAC*      13
3748      B 06774 R 471612 R      ISZ* (14      /STEP PAST .DAT -7
3749      06775 R 777773 A      LAW       -5      / .DAT -6 TO -2 GET UIC
3750      06776 R 046750 R      DAC      CT1
3751      06777 R 107015 R      JMS UFDUP1
3752      07000 R 446750 R      ISZ      CT1
3753      07001 R 606777 R      JMP      .-2
3754      B 07002 R 211524 R      LAC      (233123      / .DAT -1.0 GET MIC
3755      07003 R 060013 A      DAC*      13
3756      07004 R 060013 A      DAC*      13
3757      B 07005 R 471612 R      ISZ* (14      /STEP PAST .DAT -1.0
3758      B 07006 R 471612 R      ISZ* (14
3759      07007 R 207667 R      LAC      .DATAD      /* POSITIVE .DAT SLOTS
3760      07010 R 046750 R      DAC      CT1
3761      07011 R 107015 R      JMS UFDUP1      / .DAT 1.N GET UIC
3762      07012 R 446750 R      ISZ      CT1
3763      07013 R 607011 R      JMP      .-2
3764      07014 R 626751 R      JMP*      UFDUPD
3765      /
3766      /
3767      /THIS SUBROUTINE PUTS THE LOGGED-IN UIC INTO
3768      / .UFD IN THE CORRESPONDING ITEM IN SGNBLK
3769      /IS "UIC", OTHERWISE IT TAKES THE CODE FROM SGNBLK
3770      /
3771      /
3772      /
3773      /
3774      07015 R 000000 A      UFDUP1   0
3775      07016 R 220014 A      LAC* 14      /GET UIC FROM SGNBLK

```



3776	B	07017 R	551771 R	SAD (251103	/IS IT .SIXBIT "UIC"
3777	B	07020 R	231523 R	LAC* (141	/IF YES, GET LOGGED IN UIC
3778		07021 R	060013 A	DAC* 13	
3779		07022 R	627015 R	JMP* UFDUP1	
3780				.EJECT	

```

3781
3782 /ROUTINE TO SET UP .DAT TABLE
3783 /
3784 DATSTP 0
3785 B 07023 R 000000 A LAC* (152
3786 07024 R 231531 R SMA
3787 07025 R 740100 A JMP DAT.ON
3788 07026 R 607031 R LAC* DAT6
3789 07027 R 227671 R DAC DAT6SV
3790 07030 R 047065 R
3791 007031 R DAT.ON=.
3792 07031 R 777762 A LAW -16 / COMPUTE ADDRESS OF FIRST ENTRY
3793 B 07032 R 371515 R TAD* (123
3794 B 07033 R 071766 R DAC* (13
3795 07034 R 217101 A LAC NOFAR / COMPUTE ADDRESS OF .DAT IN SGNBLK
3796 07035 R 347734 R TAD .SGNBL
3797 B 07036 R 071612 R DAC* (14
3798 07037 R 217102 A LAC NODAT / COMPUTE -(.DAT TABLE SIZE)
3799 07040 R 744000 A CLL
3800 07041 R 740020 A RAR
3801 07042 R 740031 A TCA /TWOCMA (BR-080)
3802 07043 R 046750 R DAC CT1 / TRANSFER .DAT TABLE
3803 B 07044 R 220014 A D.LOOP LAC* 14
3804 07045 R 551677 R SAD (100000 / .DAT'S -2,-3,-7 ?
3805 07046 R 741000 A SKP / YES, DO NOT SET UP
3806 B 07047 R 607054 R JMP .+5 / NO, SET UP
3807 07050 R 231766 R LAC* (13
3808 07051 R 740030 A IAC
3809 B 07052 R 071766 R DAC* (13
3810 07053 R 607055 R JMP .+2
3811 07054 R 060013 A DAC* 13
3812 07055 R 446750 R ISZ CT1
3813 B 07056 R 607044 R JMP D.LOOP
3814 07057 R 231531 R LAC* (152
3815 07060 R 740100 A SMA
3816 07061 R 607064 R JMP DAT.CE
3817 07062 R 207065 R LAC DAT6SV
3818 07063 R 067671 R DAC* DAT6
3819 007064 R DAT.CE=.
3820 07064 R 627023 R JMP* DATSTP
07065 R 000000 A DAT6SV 0

```

			.TITLE XVM/DOS NRM	FETCH UIC ROUTINE
3821			/	
3822			/FETCH UIC AND LEAVE IN AC	
3823			/ JMS FETUIC	
3824			/	
3825				
3826		07066 R 000000 A	FETTMP 0	
3827		07067 R 000000 A	FETUIC 0	
3828		07070 R 147066 R	DZM FETTMP	
3829		07071 R 777775 A	LSPAC LAW -3	
3830		07072 R 047711 R	DAC KL57	
3831		07073 R 101664 R	FETU1 JMS KLGET	/GET NEXT CHARACTER
3832		07074 R 447711 R	ISZ KL57	
3833		07075 R 745000 A	SKP!CLL	
3834		07076 R 744002 A	STL	
3835	B	07077 R 551575 R	SAD (40	/SPACE
3836		07100 R 607114 R	JMP FETU2	
3837	B	07101 R 551577 R	SAD (15	
3838		07102 R 600372 R	JMP FETUER	/UIC ERROR
3839	B	07103 R 551576 R	SAD (175	
3840		07104 R 600372 R	JMP FETUER	/UIC ERROR
3841	B	07105 R 511574 R	AND (77	
3842		07106 R 247066 R	XOR FETTMP	
3843		07107 R 741400 A	SZL	
3844		07110 R 607120 R	JMP UICHEK	
3845		07111 R 107747 R	JMS LSHFT6	
3846		07112 R 047066 R	DAC FETTMP	
3847		07113 R 607073 R	JMP FETU1	
3848		07114 R 207066 R	FETU2 LAC FETTMP	/IF NON-ZERO ERROR
3849		07115 R 741200 A	SNA	
3850		07116 R 607071 R	JMP LSPAC	/IGNORE LEADING SPACES
3851		07117 R 600372 R	JMP FETUER	/ERROR MUST BE THREE CHARACTER UIC
3852		007120 R	UICHEK=.	
3853		07120 R 047066 R	DAC FETTMP	
3854		07121 R 206712 R	LAC LOGFLG	
3855		07122 R 741200 A	SNA	
3856		07123 R 607134 R	JMP FETU3	
3857		07124 R 101664 R	JMS KLGET	/MAKE SURE
3858	B	07125 R 551577 R	SAD (15	/ONLY 3
3859		07126 R 607134 R	JMP FETU3	/CHARACTERS WERE
3860	B	07127 R 551576 R	SAD (175	/TYPED
3861		07130 R 607134 R	JMP FETU3	
3862	B	07131 R 551575 R	SAD (40	/IGNORE SPACES
3863		07132 R 607134 R	JMP FETU3	
3864		07133 R 600372 R	JMP FETUER	
3865		07134 R 207066 R	FETU3 LAC FETTMP	
3866		07135 R 741200 A	SNA	
3867		07136 R 600372 R	JMP FETUER	
3868	B	07137 R 551634 R	SAD (777777	
3869		07140 R 600372 R	JMP FETUER	
3870	B	07141 R 551522 R	SAD (021613	/ 'BNK' AND 'PAG' ARE ONLY LEGAL
3871		07142 R 607150 R	JMP MICHEK	/IF MIC LOGED-IN.
3872	B	07143 R 551764 R	SAD (200107	

3873		07144 R	607150 R	JMP	MICHEK	
3874	B	07145 R	551770 R	SAD	(032420	
3875		07146 R	607150 R	JMP	MICHEK	
3876		07147 R	627067 R	JMP*	FETUIC	
3877			007150 R	MICHEK=.		
3878	B	07150 R	231526 R	LAC*	(142	
3879		07151 R	740100 A	SMA		
3880		07152 R	600372 R	JMP	FETUER	
3881		07153 R	207066 R	LAC	FETTMP	
3882		07154 R	627067 R	JMP*	FETUIC	

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3883          .TITLE X/M/DOS NRM      FETCH UNIT NO. ROUTINE
3884          /SUBROUTINE TO SCAN FOR UNIT NUMBER
3885          07155 R 000000 A      KLDIRC 0
3886          07156 R 101664 R      KLGUNT JMS KLGET
3887      B      07157 R 551575 R      SAD (40      /SPACE
3888          07160 R 607156 R      JMP KLGUNT
3889      B      07161 R 551577 R      SAD (15      /RETURN
3890          07162 R 627155 R      JMP* KLDIRC
3891      B      07163 R 551576 R      SAD (175      /ALT MODE
3892          07164 R 627155 R      JMP* KLDIRC
3893          07165 R 447155 R      ISZ KLDIRC
3894          07166 R 047675 R      DAC KLCHAR      /SAVE
3895      B      07167 R 511747 R      AND (170
3896      B      07170 R 551654 R      SAD (60
3897          07171 R 741000 A      SKP
3898          07172 R 607202 R      JMP NOUNIT
3899          07173 R 207675 R      LAC KLCHAR
3900          07174 R 742020 A      RTR
3901          07175 R 742020 A      RTR
3902          07176 R 044625 R      DAC DTTMP1
3903          07177 R 101664 R      JMS KLGET
3904          07200 R 047675 R      DAC KLCHAR
3905          07201 R 204625 R      LAC DTTMP1
3906          007202 R      NOUNIT=.
3907      B      07202 R 511573 R      AND (700000
3908          07203 R 627155 R      JMP* KLDIRC

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3909 .TITLE X/M/DOS NRM $INSTRUCT PRINTING ROUTINE
3910 /
3911 / PRINTING SUBROUTINE
3912 / JMS MPRINT
3913 / XX /BUFFER ADDRESS
3914 / (RETURN)
3915 /
3916 MPRINT 0
3917 07204 R 000000 A LAC* MPRINT
3918 07205 R 227204 R ISZ MPRINT
3919 07206 R 447204 R DAC KLDIRF
3920 07207 R 047715 R LAW -1
3921 07210 R 777777 A DAC KLCNT
3922 07211 R 047677 R DZM SIXROS /TREAT 00 AS RUBOUT
3923 B 07212 R 147722 R MSNXTM LAC (KLBUFF+2
3924 07213 R 211534 R DAC KLPUTP
3925 07214 R 047703 R DZM KL57
3926 07215 R 147711 R MSNXTC JMS KLFSIX
3927 07216 R 102005 R SNA
3928 07217 R 741200 A JMP MSNXTC
3929 07220 R 607216 R SAD (45 /%=CR
3930 B 07221 R 551772 R JMP MSCRLF
3931 07222 R 607231 R SAD (74 /<=END
3932 B 07223 R 551735 R JMP ENDCHK
3933 07224 R 607245 R SAD (76 />=4 SPACES
3934 B 07225 R 551737 R JMP TABCHK
3935 07226 R 607251 R MPUT=.
3936 007227 R JMS KLPUT
3937 07227 R 101714 R JMP MSNXTC
3938 B 07230 R 607216 R MSCRLF LAC (15 /PUT CR IN BUFFER
3939 07231 R 211577 R JMS KLPUT
3940 07232 R 101714 R JMS PRINT /PRINT LINE
3941 07233 R 100506 R KLBUFF
3942 07234 R 010017 R JMP MSNXTM /FILL NEXT LINE
3943 B 07235 R 607213 R MSTAB LAC (40 /TREAT AS 4 SPACES
3944 07236 R 211575 R JMS KLPUT
3945 07237 R 101714 R JMS KLPUT
3946 07240 R 101714 R JMS KLPUT
3947 07241 R 101714 R JMS KLPUT
3948 07242 R 101714 R LAC MPTMP0
3949 07243 R 207256 R JMP MSNXTC+1
3950 07244 R 607217 R ENDCHK=.
3951 007245 R JMS KLFSIX
3952 B 07246 R 102005 R SAD (74
3953 07247 R 551735 R JMP MPUT
3954 07250 R 607227 R JMP* MPRINT
3955 07250 R 627204 R TABCHK=.
3956 007251 R JMS KLFSIX
3957 B 07252 R 102005 R SAD (76
3958 07253 R 551737 R JMP MPUT
3959 07254 R 607227 R DAC MPTMP0
3960 07255 R 047256 R JMP MSTAB

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PAGE 115      DOSNRM 109      X/M/DOS NRM \$INSTRUCT PRINTING ROUTINE

3961      07256 R 000000 A      MPTMP0 0

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3962                                     .TITLE X/M/DOS NRM INITIALIZE SPECIAL SYSTEM PROGRAMS
3963                                     /
3964                                     / ROUTINES TO INITIALIZE SPECIAL SYSTEM PROGRAMS AND CALL .SYSLD
3965                                     /
3966                                     007257 R KLLOA=.
3967                                     007257 R KLGLO=.
3968                                     007257 R KLDDT=.
3969                                     007257 R KLDDTN=.
3970      B 07257 R 211625 R LAC (KLCOM / CHANGE NAME TO .SIXBT
3971      07260 R 107315 R JMS CHNSIX
3972      07261 R 607613 R JMP SYSLDR / CALL IN .SYSLD
3973
3974
3975                                     /EAG:101
3976                                     /EAG:101
3977      B 07262 R 106147 R KLEXEC JMS KLPGSH / GET FILE NAME
3978      07263 R 211516 R LAC (.SCOM+7
3979      07264 R 107315 R JMS CHNSIX
3980      07265 R 201106 R LAC EXECUT
3981      B 07266 R 050007 R DAC KLCOM
3982      07267 R 201107 R LAC EXECUT+1
3983      07270 R 050010 R DAC KLCOM+1
3984      07271 R 607613 R JMP SYSLDR
3985
3986                                     /EAG:101

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				.TITLE X/M/DOS NRM	LOAD BOSS X/M
3983					
3984	B	07272 R 211746 R	BOSS15	LAC (741000	/SET 'SKIP IF BOSS15' FLAG
3985		07273 R 047314 R		DAC SKPBOS	
3986		07274 R 201070 R		LAC LBOSS	
3987	B	07275 R 050007 R		DAC KLCOM	
3988		07276 R 201071 R		LAC LBOSS+1	
3989	B	07277 R 050010 R		DAC KLCOM+1	
3990	B	07300 R 231515 R		LAC* (123	/WHEN LOADING BOSS15 THE SYSTEM
3991		07301 R 723763 A		AAC -15	/DEVICE MUST BE ASSIGNED TO
3992		07302 R 047313 R		DAC BOSTMP	/((GAR:099).DAT -14 AND .DAT -15.
3993	B	07303 R 217104 A		LAC SDEV1	/GET SYSTEM DEVICE HANDLER NUMBER.
3994		07304 R 740030 A		IAC	
3995		07305 R 107504 R		JMS FIONO	
3996		07306 R 600342 R		JMP KLWHAT	
3997		07307 R 067313 R		DAC* BOSTMP	/((GAR:099)PUT IT IN .DAT -15.
3998		07310 R 447313 R		ISZ BOSTMP	/((GAR:099)
3999		07311 R 067313 R		DAC* BOSTMP	/((GAR:099)PUT IT IN .DAT -14.
4000		07312 R 607371 R		JMP LOADSY+2	
4001		07313 R 000000 A	BOSTMP	0	/((GAR:099) PROVIDE TEMPORARY SO THAT LOCATION
4002					/((GAR:099) 'BOSS15' WON'T BE ALTERED.
4003		07314 R 000000 A	SKPBOS	0	

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4004      .TITLE X/M/DOS NRM      CHANGE 6 .ASCII CHARACTERS TO .SIXBT
4005      /THIS ROUTINE CHANGES THE .ASCII PROGRAM NAME IN COMAND TO A 6
4006      /LETTER .SIXBT 2 WORD FILE NAME.  THE AC ON INPUT CONTAINS
4007      /THE ADDRESS WHERE THE FIRST WORD OF THE PAIR IS STORED.
4008      /      JMS      CHNSIX
4009      /      FIRST EXIT      /ERROR NAME MISSING FROM COMAND
4010      /      SECOND EXIT     /SUCCESS
4011      /
4012      CHNSIX  0
4013      B      07315 R 000000 A      DAC      COMAND+3      /STORE IN FREE TEMPORARY
4014      B      07316 R 050012 R      LAC      COMAND      /FETCH FIRST CHARACTER
4015      07317 R 210007 R      SNA!RCL      /ROTATE AND CHECK IF NO NAME
4016      07320 R 745210 A      JMP      KLW!HAT      /NO NAME TAKE FIRST EXIT
4017      07322 R 047705 R      DAC      SAVEC      /STORE FOR NEXT EXTRACTION
4018      B      07323 R 511546 R      AND      (770000      /REMOVE OTHER CHARACTERS
4019      07324 R 047704 R      DAC      SAVE      /START UP THE .SIXBT WORD
4020      07325 R 207705 R      LAC      SAVEC      /GO FOR NEXT CHARACTER
4021      07326 R 744010 A      RCL
4022      07327 R 047705 R      DAC      SAVEC      /STORE REMAINDER FOR PART OF 3RD CHAR
4023      B      07330 R 511544 R      AND      (7700      /EXTRACT SECOND CHARACTER
4024      07331 R 247704 R      XOR      SAVE      /PUT IN .SIXBT WORD
4025      07332 R 047704 R      DAC      SAVE
4026      07333 R 207705 R      LAC      SAVEC      /THE DIFFICULT EXTRACTION NOW
4027      07334 R 744010 A      RCL
4028      B      07335 R 511621 R      AND      (70      /GET THE FIRST 3 CHARACTERS
4029      07336 R 247704 R      XOR      SAVE      /PUT IN .SIXBT WORD
4030      07337 R 047704 R      DAC      SAVE
4031      B      07340 R 210010 R      LAC      COMAND+1      /THE REMAINING 3 BITS ARE IN NEXT WORD
4032      07341 R 742010 A      RTL
4033      07342 R 742010 A      RTL
4034      07343 R 047705 R      DAC      SAVEC      /SAVE FOR NEXT CHARACTERS
4035      B      07344 R 511610 R      AND      (7
4036      07345 R 247704 R      XOR      SAVE
4037      B      07346 R 070012 R      DAC*      COMAND+3      /THIS TIME WE PUT THE FIRST .SIXBT WORD AWAY
4038      B      07347 R 450012 R      ISZ      COMAND+3      /BUMP TO SECOND POSITION
4039      07350 R 207705 R      LAC      SAVEC      /GET 4TH CHARACTER
4040      B      07351 R 511546 R      AND      (770000
4041      07352 R 047704 R      DAC      SAVE
4042      07353 R 207705 R      LAC      SAVEC
4043      07354 R 744010 A      RCL
4044      B      07355 R 511544 R      AND      (7700
4045      07356 R 247704 R      XOR      SAVE
4046      07357 R 047704 R      DAC      SAVE
4047      B      07360 R 210011 R      LAC      COMAND+2
4048      07361 R 107747 R      JMS      LSHFT6
4049      07362 R 742010 A      RTL
4050      B      07363 R 511574 R      AND      (77
4051      07364 R 247704 R      XOR      SAVE
4052      B      07365 R 070012 R      DAC*      COMAND+3
4053      07366 R 627315 R      JMP*      CHNSIX

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4054 .TITLE X/M/DOS NRM LOAD SYSTEM FILES
4055 /
4056 /ROUTINE TO LOAD SYS FILES
4057 /
4058 LOADSY=.
4059 B 07367 R 211625 R LAC (KLCOM /IS THIS PROGRAM LOAD
4060 07370 R 107315 R JMS CHNSIX /CHANGE TO .SIXBT
4061 B 07371 R 211625 R LAC (KLCOM
4062 07372 R 107403 R JMS FCOMK /FIND NAME IN COMBLK
4063 B 07373 R 211773 R LAC (PLOADC
4064 07374 R 047717 R DAC TVCNT
4065 B 07375 R 211625 R LAC (KLCOM /FIND IN SYSBLK
4066 07376 R 107433 R JMS PSYSK
4067 07377 R 407314 R XCT SKPBOS / SKIP IF LOADING BOSS15
4068 07400 R 607613 R JMP SYSLDR
4069 07401 R 607616 R JMP LDBOSS
4070 /
4071 /FIND PROGRAM NAME IN COMBLK
4072 / AC CONTAINS ADDRESS OF NAME ON INPUT
4073 / JMS FCOMK
4074 / RETURN /COMBLK ADDRESS IN AC
4075 / P2 ALSO CONTAINS COMBLK ADDRESS
4076 /
4077 /((GAR:099) CORRECT ABOVE DESCRIPTION.
4078 /
4079 07402 R 000000 A P2 0
4080 07403 R 000000 A FCOMK 0
4081 07404 R 047430 R DAC FCOMTP
4082 07405 R 047431 R DAC FCOMT1
4083 07406 R 447431 R ISZ FCOMT1 /BUMP TO SECOND HALF OF NAME
4084 B 07407 R 217077 A LAC COMBLK
4085 07410 R 047402 R FCOM1 DAC P2
4086 07411 R 547736 R SAD .COMBL /END OF COMBLK?
4087 07412 R 600342 R JMP KLWHAT /YES; NOT PRESENT
4088 B 07413 R 071615 R DAC* (10
4089 07414 R 220010 A LAC* 10
4090 07415 R 567430 R SAD* FCOMTP
4091 07416 R 741000 A SKP
4092 07417 R 607423 R JMP FCOM2 /NOT THIS ENTRY
4093 07420 R 220010 A LAC* 10
4094 07421 R 567431 R SAD* FCOMT1
4095 07422 R 607426 R JMP FCOM3
4096 07423 R 207402 R FCOM2 LAC P2 /NO MATCH
4097 07424 R 367402 R TAD* P2
4098 07425 R 607410 R JMP FCOM1 /GO NEXT ENTRY
4099 07426 R 007426 R FCOM3=. /FOUND IT
4100 07426 R 207402 R LAC P2 /ADDRESS IN AC
4101 07427 R 627403 R JMP* FCOMK /EXIT
4102 07430 R 000000 A FCOMTP 0
4103 07431 R 000000 A FCOMT1 0
4104 .EJECT

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4105 /
4106 /FIND PROGRAM NAME IN SYSBLK
4107 / AC CONTAINS ADDRESS OF NAME
4108 / JMS FSYSK
4109 / RETURN /AC ADDRESS OF ENTRY
4110 / P3 ALSO CONTAINS ADDRESS OF ENTRY
4111 / AUTO INDEX 11 READY TO PICK OUT FB
4112 /
4113 /((GAR:099) CORRECT ABOVE DESCRIPTION.
4114 /
4115 07432 R 000000 A P3 0
4116 07433 R 000000 A FSYSK 0
4117 07434 R 047430 R DAC FCOMTP /SET UP NAME POINTERS
4118 07435 R 047431 R DAC FCOMT1
4119 07436 R 447431 R ISZ FCOMT1
4120 07437 R 207733 R LAC .SYSBL
4121 07440 R 740030 A IAC
4122 07441 R 047432 R FSYS1 DAC P3 /ARE WE FINISHED?
4123 07442 R 547733 R SAD .SYSBL
4124 07443 R 600342 R JMP KLWHAT
4125 B 07444 R 071640 R DAC* (11
4126 07445 R 227432 R LAC* P3
4127 07446 R 567430 R SAD* FCOMTP
4128 07447 R 741000 A SKP
4129 07450 R 607454 R JMP FSYS2 /NOT THIS ONE
4130 07451 R 220011 A LAC* 11
4131 07452 R 567431 R SAD* FCOMT1
4132 07453 R 607457 R JMP FSYS3 /FOUND
4133 07454 R 207432 R FSYS2 LAC P3 /GO TO NEXT ENTRY
4134 07455 R 723007 A AAC 7
4135 07456 R 607441 R JMP FSYS1 /SEVEN WORDS PER ENTRY
4136 07457 R 007457 R FSYS3=. /BUMP RETURN
4137 07457 R 207432 R LAC P3 /ADDRESS IN AC
4138 07460 R 627433 R JMP* FSYSK /EXIT

```

4139					.TITLE	X/M/DOS NRM	SET MODE TYPEOUT BIT
4140				/			
4141				/			
4142				/			
4143				SETMD	0		/ENTRY POINT (BR-087)
4144	B	07462	R	231526	R	LAC*	(142 /GET SCOM + 42 (BR-087)
4145	B	07463	R	511555	R	AND	(773777 /CLEAR BIT IF SET (BR-087)
4146	B	07464	R	251543	R	XOR	(004000 /SET BIT 6 (BR-087)
4147	B	07465	R	071526	R	DAC*	(142 /SAVE WORD IN SCOM+42 (BR-087)
4148		07466	R	627461	R	JMP*	SETMD /RETURN TO CALLER (BR-087)
4149						.EJECT	

```

4150 /
4151 /GET HANDLER NAME FROM TABLE
4152 / AC CONTAINS NUMBER OF HANDLER
4153 / JMS FIONM
4154 / AC CONTAINS NAME OF HANDLER ON RETURN
4155 /
4156 07467 R 000000 A FIONM 0
4157 07470 R 047545 R DAC HANNO
4158 07471 R 740001 A CMA
4159 07472 R 047546 R DAC HANNAM /COUNTER
4160 07473 R 777777 A LAW -1
4161 07474 R 347674 R TAD SGNTAB
4162 07475 R 047547 R DAC P1
4163 07476 R 107523 R FIO1 JMS NHAN /FETCH NEXT HANDLE NAME
4164 07477 R 600422 R JMP BADHNO /((GAR:095) USED TO BE 'JMP FIOBHN')
4165 07500 R 447546 R ISZ HANNAM /COUNT #
4166 07501 R 607476 R JMP FIO1
4167 07502 R 047546 R DAC HANNAM /STORE AWAY NAME FOUND
4168 07503 R 627467 R JMP* FIONM /EXIT
4169 /((GAR:095) DELETED 14 LINES WHICH HANDLED THE BATCH DEVICE AS
4170 /((GAR:095) A SPECIAL CASE. THIS IS NO LONGER NECESSARY.
4171 /
4172 /GET HANDLER NUMBER FROM TABLE
4173 / AC CONTAINS HANDLE NAME
4174 / JMS FIONO
4175 / FIRST RETURN /NOT IN TABLE
4176 / SECOND RETURN /AC CONTAINS #
4177 /
4178 07504 R 000000 A FIONO 0
4179 07505 R 047546 R DAC HANNAM /SAVE NAME
4180 07506 R 777777 A LAW -1
4181 07507 R 347674 R TAD SGNTAB
4182 07510 R 047547 R DAC P1
4183 07511 R 147545 R DZM HANNO
4184 07512 R 107523 R FIO2 JMS NHAN /FETCH NEXT HANDLER
4185 07513 R 627504 R JMP* FIONO /HANDLER NOT FOUND
4186 07514 R 547546 R SAD HANNAM /IS THIS THE ONE
4187 07515 R 607520 R JMP FIO3 /YES
4188 07516 R 447545 R ISZ HANNO /BUMP HANDLR #
4189 07517 R 607512 R JMP FIO2 /ITERATE
4190 07520 R 207545 R FIO3 LAC HANNO /GET HANDLER # IN AC
4191 07521 R 447504 R ISZ FIONO /BUMP TO SECOND EXIT
4192 07522 R 627504 R JMP* FIONO
4193 /
4194 /GO TO NEXT HANDLER IN TABBE
4195 / P1 POINTS TO LAST HANDLER
4196 / JMS NHAN
4197 / FIRST RETURN /END OF TABLE REACHED
4198 / SECOND RETURN /FOUND NEXT HANDLERR
4199 / AC CONTAINS HANDLER NAME
4200 /
4201 07523 R 000000 A NHAN 0

```

4202		07524 R 447547 R	NHAN1	ISZ	P1	/EXAMINE NEXT ENTRY FOR HANDLER NAME
4203		07525 R 207547 R		LAC	P1	
4204		07526 R 547735 R		SAD	LSGNBL	/END REACHED
4205		07527 R 627523 R		JMP*	NHAN	/YES TAKE FIRST EXIT
4206		07530 R 227547 R		LAC*	P1	/IS THIS A HANDLER NAME
4207	B	07531 R 511732 R		AND	(777700	/TAKE ONLY TOP 12 BITS
4208		07532 R 741200 A		SNA		/YES
4209		07533 R 607537 R		JMP	NHAN2	/NO
4210		07534 R 227547 R		LAC*	P1	/GET INTO AC
4211		07535 R 447523 R		ISZ	NHAN	/BUMP EXIT
4212		07536 R 627523 R		JMP*	NHAN	
4213		07537 R 227547 R	NHAN2	LAC*	P1	/SKIP OVER SKIPS
4214		07540 R 744010 A		RCL		/QUICK MULTIPLY BY 3
4215		07541 R 367547 R		TAD*	P1	
4216		07542 R 347547 R		TAD	P1	
4217		07543 R 047547 R		DAC	P1	
4218		07544 R 607524 R		JMP	NHAN1	/TRY AGAIN
4219		07545 R 000000 A	HANNO	0		/HANDLER #
4220		07546 R 000000 A	HANNAM	0		/HANDLER NAME
4221		07547 R 000000 A	P1	0		/POINTS TO HANDLER IN TABLE

.TITLE DOS NRM 'LDRUIC'

/ROUTINE LDRUIC

/LDRUIC GOES THROUGH THE DAT SLOT TABLE AND PLACES THE  
 /APPROPRIATE UIC ('BNK' FOR BANK SYSTEMS AND 'PAG' FOR  
 /PAGE SYSTEMS) IN THE UFD TABLE WHEREVER THE UIC

/'SYS' APPEARS

/CALLING SEQUENCE:

/ JMS LDRUIC

/ (RETURN)

LDRUIC=.

4222			007550 R			
4223			000000 A			
4224						
4225						
4226						
4227						
4228						
4229						
4230						
4231						
4232						
4233						
4234						
4235	B	07550 R	231525 R	LAC*	(125	/POINTER TO .UFD+0
4236		07552 R	723771 A	AAC	-7	
4237		07553 R	047613 R	DAC	SYSLDR	/NOW POINTS TO .DAT -7.
4238	B	07554 R	211524 R	LAC	(233123	/'SYS'
4239		07555 R	067613 R	DAC*	SYSLDR	/RESET -7 TO SYS.
4240	B	07556 R	231517 R	LAC*	(.SCOM+4	//BIT 11=1 IF BANK MODE.
4241	B	07557 R	511520 R	AND	(100	
4242		07560 R	751200 A	SNA!CLA		
4243	B	07561 R	211521 R	LAC	(156274	/'PAG' (BUILT BY ADDITION) OR
4244	B	07562 R	351522 R	TAD	(021613	/'BNK'.
4245		07563 R	047613 R	DAC	SYSLDR	
4246	B	07564 R	231523 R	LAC*	(141	/CURRENT UIC.
4247	B	07565 R	551524 R	SAD	(233123	/'SYS'?
4248		07566 R	741000 A	SKP		
4249		07567 R	607572 R	JMP	..+3	
4250		07570 R	207613 R	LAC	SYSLDR	/YES - CHANGE UIC TO 'BNK' OR 'PAG'
4251	B	07571 R	071523 R	DAC*	(141	
4252		07572 R	777762 A	LAW	-16	
4253	B	07573 R	371525 R	TAD*	(125	
4254		07574 R	047547 R	DAC	P1	/START OF .UFD.
4255		07575 R	777762 A	LAW	-16	
4256		07576 R	347667 R	TAD	.DATAD	
4257		07577 R	046750 R	DAC	CT1	
4258			007600 R	SYSLD1=.		
4259		07600 R	446750 R	ISZ	CT1	
4260		07601 R	741000 A	SKP		
4261		07602 R	627550 R	JMP*	LDRUIC	
4262		07603 R	447547 R	ISZ	P1	
4263	B	07604 R	211524 R	LAC	(233123	/'SYS' FOR THIS SLOT?
4264		07605 R	567547 R	SAD*	P1	
4265		07606 R	741000 A	SKP		
4266		07607 R	607600 R	JMP	SYSLD1	
4267		07610 R	207613 R	LAC	SYSLDR	/YES - CHANGE TO BNK OR PAG.
4268		07611 R	067547 R	DAC*	P1	
4269		07612 R	607600 R	JMP	SYSLD1	



```

4270                                     .TITLE X/M/DOS NRM      'SYSLDR'
4271                                     /
4272                                     /SYSTEM LOADER ROUTINE
4273                                     /
4274                                     SYSLDR=.
4275      B      07613 R 231531 R          LAC*      (152          /BOSS MODE?
4276      07614 R 740100 A              SMA          /YES, SKIP
4277      07615 R 607626 R              JMP      SYSLD2      /NO, NO SPECIAL CODE
4278      007616 R
4279      B      07616 R 211774 R          LDBOSS=.    LAC      (030402      /GET HANDLER NO. FOR CDB
4280      07617 R 107504 R              JMS      FIONO
4281      07620 R 600425 R              JMP      BADBOS      /THERE IS NO CDB HANLER
4282      07621 R 067670 R              DAC*      DAT5
4283      B      07622 R 211775 R          LAC      (142001      /GET HANDLER NO. FOR LPA
4284      07623 R 107504 R              JMS      FIONO
4285      07624 R 600425 R              JMP      BADBOS      /THERE IS NO LPA ON SYSTEM
4286      07625 R 067671 R              DAC*      DAT6
4287      07626 R 107550 R          SYSLD2    JMS      LDRUIC
4288      B      07627 R 231526 R          LAC*      (142
4289      B      07630 R 511776 R          AND      (637777
4290      B      07631 R 251677 R          XOR      (100000
4291      B      07632 R 071526 R          DAC*      (142
4292      07633 R 000000 A              CAL+0
4293      07634 R 000024 A              24
4294      07635 R 010007 R              KLCOM

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4328

.TITLE X/M/DOS NRM 'NRMEXI'

/ ROUTINE NRMEXI

/ THIS ROUTINE CAUSES A NON-RESIDENT MONITOR  
/ EXIT WITH BIT 1 OF .SCOM+42 SET TO INDICATE  
/ RETURN TO NON-RESIDENT MONITOR

CTRLC=.

LAC PRTMP  
DAC\* DATM12  
LAW 777776  
AND\* (SC.NMF)  
DAC\* (SC.NMF)

/ENTRY POINT FOR ^C  
/RESTORE .DAT -12

/ TURN OFF BATCH

/EAG:101

/EAG:101

/EAG:101

NRMEXI=.

LAC\* (.SCOM+52  
SMA  
JMP NRM.1  
LAC (030402  
JMS FIONO  
JMP BADBOS  
DAC\* DAT5  
LAC (142001  
JMS FIONO  
JMP BADBOS  
DAC\* DAT6

/BOSS MODE? (BR-086)

/YES, SKIP

/NO, SKIP SPECIAL CODE

/GET HANDLER NO. FOR CDB

/THERE IS NO CDB ON SYSTEM

/GET HANDLER NO. FOR LPA

/THERE IS NO LPA HANDLER ON SYSTEM

NRM.1=.

JMS LDRUIC  
LAC\* (.SCOM+42  
AND (477777  
XOR (300000  
DAC\* (.SCOM+42

/SET BIT1 OF .SCOM+42 TO 1

NRM.2=.

.EXIT  
CAL+0  
15

/LOGOUT COMES HERE.

/EXIT

07663 R 000000 A \*G  
07664 R 000015 A \*G

		.TITLE XLM/DOS NRM		STORAGE CONSTANTS
4329				/STORAGE CONSTANTS AND COUNTERS
4330				
4331	07665 R 000000 A	EXITLT	0	/ SAME AS .SCOM+34
4332	07666 R 000000 A	BANKBT	0	
4333	07667 R 000000 A	.DATAD	0	/ -(LARGEST # OF POS. .DAT SLOTS)
4334	07670 R 000000 A	DAT5	0	
4335	07671 R 000000 A	DAT6	0	
4336	07672 R 000000 A	DATM2	0	/ .DAT -2
4337	07673 R 000001 A	DAT1	1	/ .DAT +1
4338	07674 R 000000 A	SGNTAB	0	/ BEGINNING OF I/O DEVICE TABLE
4339		.SCOM=100		
4340	07675 R 000000 A	KLCHAR	0	/LAST CHARACTER
4341	07676 R 000000 A	KLCHR2	0	/INTERMEDIATE CHAR STORAGE
4342	07677 R 000000 A	KLCNT	0	/COUNTER
4343	07700 R 000000 A	KLCOMP	0	/COMMAND POINTER
4344	07701 R 000000 A	KLGETP	0	/KLGET POINTER
4345	07702 R 000000 A	KLGET5	0	/KLGET COUNTER
4346	07703 R 000000 A	KLPUTP	0	/KLPUT POINTER
4347	07704 R 000000 A	SAVE	0	
4348	07705 R 000000 A	SAVEC	0	
4349	07706 R 000000 A	KLWD1	0	/TEMP FOR KLPUT
4350	07707 R 000000 A	KLWD2	0	/TEMP FOR KLPUT
4351	07710 R 000000 A	KLWD3	0	/TEMP FOR KLPUT
4352	07711 R 000000 A	KL57	0	/KLPUT COUNTER
4353	07712 R 000000 A	KLDEV/C	0	/DEVICE CODE
4354	07713 R 000000 A	KLDATD	0	/DAT DIGITS
4355	07714 R 000000 A	KLSIGN	0	/SIGN STORAGE
4356	07715 R 000000 A	KLDIRF	0	/FILE MAP ADDRESS
4357	07716 R 000000 A	KLCNTB	0	/BIT COUNTER
4358	07717 R 000000 A	TVCNT	0	/NO. OF TRANSFER VECTORS
4359	07720 R 000000 A	UNIT	0	/UNIT NO. ON GET
4360		017777 A	STOPER=17777	
4361	07721 R 000000 A	SWI	0	
4362	07722 R 000000 A	SIXROS	0	
4363	07723 R 000000 A	KLCNTT	0	
4364	07724 R 000000 A	KLPOS	0	
4365	07725 R 000000 A	DATM12	0	
4366	07726 R 000000 A	DATM14	0	
4367	07727 R 000000 A	DATM15	0	
4368	07730 R 000000 A	SDADD	0	
4369	07731 R 000000 A	LPADDR	0	
4370	07732 R 000000 A	SINGOK	0	
4371	07733 R 000000 A	.SYSBL	0	
4372	07734 R 000000 A	.SGNBL	0	
4373	07735 R 000000 A	LSGNBL	0	
4374	07736 R 000000 A	.COMBL	0	
4375	07737 R 000000 A	TEMP	0	/TEMP STORAGE FOR REQUEST (BR-089)
4376	07740 R 000000 A	MANSAP	0	/STORAGE FOR MANUAL QDUMP ADR. (BR-094)
4377	07741 R 161716 A	KLNONE	.SIXBT 'NONE'	
	07742 R 050000 A			
4378	07743 R 476340 A	ON	.ASCII /ON/	
	07744 R 000000 A			

4379	07744 R			.LOC	-1
4380	07744 R	476150 A	OFr	.ASCII	/OFF/
	07745 R	600000 A			
4381	07745 R			.LOC	-1
4382	07745 R	334000 A	MT7	.ASCII	/7/
	07746 R	000000 A			
4383	07746 R			.LOC	-1
4384	07746 R	344000 A	MT9	.ASCII	/9/
	07747 R	000000 A			
4385	07747 R			.LOC	-1

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4386 .TITLE X/M/DOS NRM SHIFT ROUTINES
4387 /
4388 /SHIFT ROUTINES
4389 /
4390 /SHIFT LEFT SIX
4391 07747 R 000000 A LSHFT6 0
4392 07750 R 742010 A RTL
4393 07751 R 742010 A RTL
4394 07752 R 742010 A RTL
4395 07753 R 627747 R JMP* LSHFT6
4396 /SHIFT RIGHT SIX
4397 07754 R 000000 A RSHFT6 0
4398 07755 R 742020 A RTR
4399 07756 R 742020 A RTR
4400 07757 R 742020 A RTR
4401 07760 R 627754 R JMP* RSHFT6
```

.TITLE X/M/DOS NRM 'DGITCK'

/ROUTINE DGITCK

/DGITCK CHECKS THE VALUE IN THE AC FOR A VALID OCTAL  
/VALUE FOR A DECIMAL DIGIT. I.E., IF THE AC VALUE IS NOT  
/BETWEEN 0 AND 11 (INCLUSIVE) THE AC VALUE IS DEFINED AS  
/INVALID.

/CALLING SEQUENCE:

/ JMS DGITCK

/ (RETURN IF VALID)

/CONTROL GOES TO KLWHAT IF VALUE IS INVALID

DGITCK=.

4414 007761 R  
4415 07761 R 000000 A  
4416 07762 R 741100 A  
4417 07763 R 600403 R  
4418 07764 R 723766 A  
4419 07765 R 740100 A  
4420 07766 R 600403 R  
4421 07767 R 627761 R

0  
SPA  
JMP BADIGT  
AAC -12  
SMA  
JMP BADIGT  
JMP\* DGITCK

					.TITLE X/M/DOS NRM	'PLIMCN'
4422						
4423		07770 R 000000 A	PLIMCN	0		
4424	B	07771 R 050006 R		DAC	PLIMTM	
4425		07772 R 741100 A		SPA		
4426	B	07773 R 610003 R		JMP	LIMER	
4427		07774 R 227770 R		LAC*	PLIMCN	
4428		07775 R 740030 A		IAC		
4429		07776 R 740031 A		TCA		/TWOCMA (BR-081)
4430	B	07777 R 350006 R		TAD	PLIMTM	
4431		10000 R 740100 A		SMA		
4432		10001 R 600003 R		JMP	LIMER	
4433	B	10002 R 447770 R		ISZ	PLIMCN	
4434	B	10003 R 447770 R	LIMER	ISZ	PLIMCN	
4435		10004 R 200006 R		LAC	PLIMTM	
4436	B	10005 R 627770 R		JMP*	PLIMCN	
4437		10006 R 000000 A	PLIMTM	0		

SYSBLK

.TITLE SYSBLK

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SYSBLK=16100

COMBLK=17077



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4448 .TITLE SGNBLK
4449 /
4450 / .LOC 17100
4451 / THIS IS WHERE SGNBLK STARTS. SGNBLK IS BLOCK 35 OF THE SYSTEM
4452 /DEVICE. SGNBLK IS A SEPERATE SOURCE FROM THE MONITOR. SGNBLK
4453 /STARTS AT LOCATION 17100 OF THE MONITOR.
4454 /
4455 017100 A SGNBLK=17100 /END OF I/O DEVICE TABLE
4456 017101 A NOPAR=SGNBLK+1 /# OF SYSTEM PARAMETERS
4457 017102 A NODAT=SGNBLK+2 /# OF .DAT SLOTS
4458 017103 A NOSKP=SGNBLK+3 /# OF SKIPS
4459 017104 A SDEV1=SGNBLK+4 /.SIXBT 'DV' SYSTEM DEVICE CODE
4460 017105 A SCOM4=SGNBLK+5 /.SCOM+4 CONTENTS
4461 017106 A SCOM20=SGNBLK+6 /.SCOM+20 CONTENTS
4462 017107 A X1=SGNBLK+7 /NUMBER OF BUFFER WORDS/FILE
4463 017110 A FILES=SGNBLK+10 /DEFAULT FILES COMMAND
4464 017111 A MIC=SGNBLK+11 /MONITOR IDENTIFICATION CODE
4465 017112 A SCOM33=SGNBLK+12 //^X FEATURE - CONTENTS OF .SCOM+33
4466 017113 A PROTCT=SGNBLK+13 /DEFAULT PROTECTION CODE FOR FILES.

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4467  
4468  
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10007 R

010007 R  
010007 R  
010013 R  
010017 R  
A

.TITLE BUFFER

/ THIS 257 (10) WORD BUFFER IS USED FOR LISTING AND REFRESHING  
/ DECTAPE BUFFERS AS WELL AS BEING A TELETYPE BUFFER ETC. INITIAL  
/ CONTENTS SHOULD BE IGNORED.

/  
COMAND=.  
KLCOM=COMAND /.BLOCK 4  
KLCOM2=KLCOM+4 /.BLOCK 4  
KLBUFF=KLCOM2+4 /TELETYPE I/O BUFFER  
.BLOCK 70

			.TITLE X/M/DOS NRM	\$SCOM TYPEOUT TEXT
4479	10077 R	760000 A	LAW	0
4480	10100 R	760000 A	LAW	0
4481	10101 R	052473 A	SCMHDR	.ASCII <12>'SYSTEM INFO - X/M/DOS -
4482	10102 R	151650 A		'<12><15>
	10103 R	426324 A		
	10104 R	044634 A		
	10105 R	432364 A		
	10106 R	026500 A		
	10107 R	542551 A		
	10110 R	527610 A		
	10111 R	476464 A		
	10112 R	026500 A		
	10113 R	201004 A		
	10114 R	020100 A		
	10115 R	201004 A		
	10116 R	020100 A		
	10117 R	050320 A		
	10120 R	000000 A		
4483	10120 R		.LOC	.-1
4484	10120 R	001566 A	SCMBRA	.ASCII <0>'7646 - BOOTSTRAP RESTART ADDR '<15>
	10121 R	632154 A		
	10122 R	201324 A		
	10123 R	041236 A		
	10124 R	476512 A		
	10125 R	352244 A		
	10126 R	406404 A		
	10127 R	051212 A		
	10130 R	516510 A		
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	10133 R	442244 A		
	10134 R	200320 A		
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4485	10135 R		.LOC	.-1
4486	10135 R	001566 A	SCMFCB	.ASCII <0>'7636 - 1ST FREE CELL BELOW BOOTSTRAP '<15>
	10136 R	631554 A		
	10137 R	201324 A		
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	10141 R	521010 A		
	10142 R	651212 A		
	10143 R	425010 A		
	10144 R	342630 A		
	10145 R	461010 A		
	10146 R	242630 A		
	10147 R	476564 A		
	10150 R	041236 A		
	10151 R	476512 A		
	10152 R	352244 A		
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	10154 R	006400 A		
4487	10155 R	000000 A	SCMDAT	.ASCII <0><0><0><0>' - ADDR OF .DAT '<15>

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10156 R 000100 A
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10163 R 272110 A
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10173 R 743100 A
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10177 R 000000 A
4490 10177 R
4491 10177 R 000000 A   .LOC      .-1
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10203 R 476144 A
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10205 R 515344 A
10206 R 027210 A
10207 R 406504 A
10210 R 051630 A
10211 R 476512 A
10212 R 320032 A
4492 10213 R 406411 A   SCMAPI  .ASCII  'API IS ENABLED'<15>
10214 R 120222 A
10215 R 515010 A
10216 R 547202 A
10217 R 412310 A
10220 R 542032 A
4493 10221 R 542551 A   SCMX/M  .ASCII  'X/M MODE IS ENABLED'<15>      /(BR-086)
10222 R 520232 A
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10227 R 412310 A
10230 R 542032 A
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10234 R 442500 A
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	10236 R 551202 A	
	10237 R 522231 A	
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	10242 R 344202 A	
	10243 R 472350 A	
	10244 R 546100 A	
	10245 R 466030 A	
	10246 R 752202 A	
	10247 R 502124 A	
	10250 R 040646 A	
	10251 R 516531 A	
	10252 R 542610 A	
	10253 R 202053 A	
	10254 R 120220 A	
	10255 R 406350 A	
	10256 R 446212 A	
	10257 R 512461 A	
4496	10260 R 500000 A	SCMLPS .ASCII ' CHARACTER LINE PRINTER ASSUMED BY HANDLERS'<15>
	10261 R 201004 A	
	10262 R 020100 A	
	10263 R 442032 A	
	10264 R 240606 A	
	10265 R 522132 A	
	10266 R 220230 A	
	10267 R 446350 A	
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	10272 R 652212 A	
	10273 R 511010 A	
	10274 R 151646 A	
	10275 R 526330 A	
	10276 R 542100 A	
	10277 R 412624 A	
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	10301 R 472111 A	
	10302 R 442644 A	
	10303 R 514320 A	
	10304 R 000000 A	
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	10306 R 000100 A	
	10307 R 265013 A	
	10310 R 650500 A	
	10311 R 406110 A	
	10312 R 451212 A	
	10313 R 516464 A	
	10314 R 043236 A	
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	10316 R 540634 A	
	10317 R 526031 A	
	10320 R 420210 A	
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10332 R 051236 A
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10334 R 352222 A
10335 R 476344 A
10336 R 041636 A
10337 R 422121 A
10340 R 500000 A
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10347 R 425012 A
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10352 R 352222 A
10353 R 476344 A
10354 R 041636 A
10355 R 422121 A
10356 R 500000 A
4500 10357 R 000000 A SCMBUF .ASCII <0><0><0><0>' - DEFAULT BUFFS SETTING'<15>
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10363 R 406531 A
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10366 R 643246 A
10367 R 202470 A
10370 R 552250 A
10371 R 446350 A
10372 R 706400 A
4501 10373 R 445371 A SCM01 .ASCII ' I/O HANDLERS AVAILABLE'<15>
10374 R 720220 A
10375 R 406350 A
10376 R 446212 A
10377 R 512464 A
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10401 R 406231 A
10402 R 440604 A
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	10410 R 052431 A		
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	10412 R 401157 A		
	10413 R 175440 A		
	10414 R 012303 A		
	10415 R 111140 A		
	10416 R 151704 A		
	10417 R 052354 A		
	10420 R 400114 A		
	10421 R 144006 A		
	10422 R 251603 A		
	10423 R 241117 A		
	10424 R 162345 A		
4503	10425 R 740000 A	SCM3	.SIXBT 'PRA TAPE READER: INPUT, ALL MODES, ALL FUNCTIONS%<'
	10426 R 202201 A		
	10427 R 404040 A		
	10430 R 240120 A		
	10431 R 054022 A		
	10432 R 050104 A		
	10433 R 052272 A		
	10434 R 401116 A		
	10435 R 202524 A		
	10436 R 544001 A		
	10437 R 141440 A		
	10440 R 151704 A		
	10441 R 052354 A		
	10442 R 400114 A		
	10443 R 144006 A		
	10444 R 251603 A		
	10445 R 241117 A		
	10446 R 162345 A		
4504	10447 R 740000 A	SCM4	.SIXBT 'PRB TAPE READER: INPUT, IOPS ASCII MODE, ALL FUNCTIONS%<'
	10450 R 202202 A		
	10451 R 404040 A		
	10452 R 240120 A		
	10453 R 054022 A		
	10454 R 050104 A		
	10455 R 052272 A		
	10456 R 401116 A		
	10457 R 202524 A		
	10460 R 544011 A		
	10461 R 172023 A		
	10462 R 400123 A		
	10463 R 031111 A		
	10464 R 401517 A		
	10465 R 040554 A		
	10466 R 400114 A		
	10467 R 144006 A		
	10470 R 251603 A		
	10471 R 241117 A		

	10472 R 162345 A		
	10473 R 740000 A		
4505	10474 R 202001 A	SCM5	.SIXBT 'PPA PUNCH: OUTPUT, ALL MODES, ALL FUNCTIONS%<'
	10475 R 404040 A		
	10476 R 202516 A		
	10477 R 031072 A		
	10500 R 401725 A		
	10501 R 242025 A		
	10502 R 245440 A		
	10503 R 011414 A		
	10504 R 401517 A		
	10505 R 040523 A		
	10506 R 544001 A		
	10507 R 141440 A		
	10510 R 062516 A		
	10511 R 032411 A		
	10512 R 171623 A		
4506	10513 R 457400 A	SCM6	.SIXBT 'PPB PUNCH: OUTPUT, ALL MODES LESS IOPS ASCII, ALL FUNCTIONS%<'
	10514 R 202002 A		
	10515 R 404040 A		
	10516 R 202516 A		
	10517 R 031072 A		
	10520 R 401725 A		
	10521 R 242025 A		
	10522 R 245401 A		
	10523 R 141440 A		
	10524 R 151704 A		
	10525 R 052340 A		
	10526 R 140523 A		
	10527 R 234011 A		
	10530 R 172023 A		
	10531 R 400123 A		
	10532 R 031111 A		
	10533 R 544001 A		
	10534 R 141440 A		
	10535 R 062516 A		
	10536 R 032411 A		
	10537 R 171623 A		
4507	10540 R 457400 A	SCM7	.SIXBT 'PPC PUNCH: OUTPUT, IOPS BINARY MODE, ALL FUNCTIONS%<'
	10541 R 202003 A		
	10542 R 404040 A		
	10543 R 202516 A		
	10544 R 031072 A		
	10545 R 401725 A		
	10546 R 242025 A		
	10547 R 245440 A		
	10550 R 111720 A		
	10551 R 234002 A		
	10552 R 111601 A		
	10553 R 223140 A		
	10554 R 151704 A		
	10555 R 055440 A		



	10556 R 011414 A	
	10557 R 400625 A	
	10560 R 160324 A	
	10561 R 111716 A	
4508	10562 R 234574 A	SCM8    .SIXBT 'DTA    DECTAPE: 3 FILES, I/O, ALL MODES, ALL FUNCTIONS%<'
	10563 R 042401 A	
	10564 R 404040 A	
	10565 R 040503 A	
	10566 R 240120 A	
	10567 R 057240 A	
	10570 R 634006 A	
	10571 R 111405 A	
	10572 R 235440 A	
	10573 R 115717 A	
	10574 R 544001 A	
	10575 R 141440 A	
	10576 R 151704 A	
	10577 R 052354 A	
	10600 R 400114 A	
	10601 R 144006 A	
	10602 R 251603 A	
	10603 R 241117 A	
	10604 R 162345 A	
4509	10605 R 740000 A	SCM9    .SIXBT 'DTB    DECTAPE: 2 FILES, I/O, IOPS MODES, LIM FUNCTIONS%<'
	10606 R 042402 A	
	10607 R 404040 A	
	10610 R 040503 A	
	10611 R 240120 A	
	10612 R 057240 A	
	10613 R 624006 A	
	10614 R 111405 A	
	10615 R 235440 A	
	10616 R 115717 A	
	10617 R 544011 A	
	10620 R 172023 A	
	10621 R 401517 A	
	10622 R 040523 A	
	10623 R 544014 A	
	10624 R 111540 A	
	10625 R 062516 A	
	10626 R 032411 A	
	10627 R 171623 A	
4510	10630 R 457400 A	SCM10    .SIXBT 'DTC    DECTAPE: 1 FILE, INPUT, IOPS MODES, LIM FUNCTIONS%<'
	10631 R 042403 A	
	10632 R 404040 A	
	10633 R 040503 A	
	10634 R 240120 A	
	10635 R 057240 A	
	10636 R 614006 A	
	10637 R 111405 A	
	10640 R 544011 A	
	10641 R 162025 A	

	10642 R 245440 A	
	10643 R 111720 A	
	10644 R 234015 A	
	10645 R 170405 A	
	10646 R 235440 A	
	10647 R 141115 A	
	10650 R 400625 A	
	10651 R 160324 A	
	10652 R 111716 A	
4511	10653 R 234574 A	SCM11    .SIXBT    'DTD    DECTAPE: 1 FILE, I/O. ALL MODES, ALL FUNCTIONS%<'
	10654 R 042404 A	
	10655 R 404040 A	
	10656 R 040503 A	
	10657 R 240120 A	
	10660 R 057240 A	
	10661 R 614006 A	
	10662 R 111405 A	
	10663 R 544011 A	
	10664 R 571754 A	
	10665 R 400114 A	
	10666 R 144015 A	
	10667 R 170405 A	
	10670 R 235440 A	
	10671 R 011414 A	
	10672 R 400625 A	
	10673 R 160324 A	
	10674 R 111716 A	
4512	10675 R 234574 A	SCM12    .SIXBT    'DTE    DECTAPE: 1 FILE, I/O. ALL MODES, NO .MTAPE%<'
	10676 R 042405 A	
	10677 R 404040 A	
	10700 R 040503 A	
	10701 R 240120 A	
	10702 R 057240 A	
	10703 R 614006 A	
	10704 R 111405 A	
	10705 R 544011 A	
	10706 R 571754 A	
	10707 R 400114 A	
	10710 R 144015 A	
	10711 R 170405 A	
	10712 R 235440 A	
	10713 R 161740 A	
	10714 R 561524 A	
	10715 R 012005 A	
4513	10716 R 457400 A	SCM13    .SIXBT    'DTF    DECTAPE: NON-FILE ORIENTED FOR F4 .OTS%<'
	10717 R 042406 A	
	10720 R 404040 A	
	10721 R 040503 A	
	10722 R 240120 A	
	10723 R 057240 A	
	10724 R 161716 A	
	10725 R 550611 A	

10726 R 140540 A  
 10727 R 172211 A  
 10730 R 051624 A  
 10731 R 050440 A  
 10732 R 061722 A  
 10733 R 400664 A  
 10734 R 405617 A  
 10735 R 242345 A  
 10736 R 740000 A

4514      SCM14      .SIXBT      'DKA      DECDISK: N FILES, I/O, ALL MODES, ALL FUNCTIONS%<'

10737 R 041301 A  
 10740 R 404040 A  
 10741 R 040503 A  
 10742 R 041123 A  
 10743 R 137240 A  
 10744 R 164006 A  
 10745 R 111405 A  
 10746 R 235440 A  
 10747 R 115717 A  
 10750 R 544001 A  
 10751 R 141440 A  
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 10753 R 052354 A  
 10754 R 400114 A  
 10755 R 144006 A  
 10756 R 251603 A  
 10757 R 241117 A  
 10760 R 162345 A  
 10761 R 740000 A

4515      SCM15      .SIXBT      'DKB      DECDISK: N FILES, I/O, ALL MODES, LIM FUNCTIONS%<'

10762 R 041302 A  
 10763 R 404040 A  
 10764 R 040503 A  
 10765 R 041123 A  
 10766 R 137240 A  
 10767 R 164006 A  
 10770 R 111405 A  
 10771 R 235440 A  
 10772 R 115717 A  
 10773 R 544001 A  
 10774 R 141440 A  
 10775 R 151704 A  
 10776 R 052354 A  
 10777 R 401411 A  
 11000 R 154006 A  
 11001 R 251603 A  
 11002 R 241117 A  
 11003 R 162345 A  
 11004 R 740000 A

4516      SCM16      .SIXBT      'DKC      DECDISK: N FILES, INPUT, ALL MODES, LIM FUNCTIONS%<'

11005 R 041303 A  
 11006 R 404040 A  
 11007 R 040503 A  
 11010 R 041123 A  
 11011 R 137240 A

11012 R 164006 A  
 11013 R 111405 A  
 11014 R 235440 A  
 11015 R 111620 A  
 11016 R 252454 A  
 11017 R 400114 A  
 11020 R 144015 A  
 11021 R 170405 A  
 11022 R 235440 A  
 11023 R 141115 A  
 11024 R 400625 A  
 11025 R 160324 A  
 11026 R 111716 A  
 11027 R 234574 A  
 11030 R 042001 A  
 11031 R 404040 A  
 11032 R 041123 A  
 11033 R 132001 A  
 11034 R 031372 A  
 11035 R 401640 A  
 11036 R 061114 A  
 11037 R 052354 A  
 11040 R 401157 A  
 11041 R 175440 A  
 11042 R 011414 A  
 11043 R 401517 A  
 11044 R 040523 A  
 11045 R 544001 A  
 11046 R 141440 A  
 11047 R 062516 A  
 11050 R 032411 A  
 11051 R 171623 A  
 11052 R 457400 A  
 11053 R 042002 A  
 11054 R 404040 A  
 11055 R 041123 A  
 11056 R 132001 A  
 11057 R 031372 A  
 11060 R 401640 A  
 11061 R 061114 A  
 11062 R 052354 A  
 11063 R 401157 A  
 11064 R 175440 A  
 11065 R 011414 A  
 11066 R 401517 A  
 11067 R 040523 A  
 11070 R 544014 A  
 11071 R 111540 A  
 11072 R 062516 A  
 11073 R 032411 A  
 11074 R 171623 A  
 11075 R 457400 A

4517

SCM17 .SIXBT 'DPA DISKPACK: N FILES, I/O, ALL MODES, ALL FUNCTIONS%&lt;&lt;'

4518

SCM18 .SIXBT 'DPB DISKPACK: N FILES, I/O, ALL MODES, LIM FUNCTIONS%&lt;&lt;'

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4519      11076 R 042003 A      SCM19      .SIXBT      'DPC      DISKPACK: N FILES, INPUT, ALL MODES, LIM FUNCTIONS%<'
          11077 R 404040 A
          11100 R 041123 A
          11101 R 132001 A
          11102 R 031372 A
          11103 R 401640 A
          11104 R 061114 A
          11105 R 052354 A
          11106 R 401116 A
          11107 R 202524 A
          11110 R 544001 A
          11111 R 141440 A
          11112 R 151704 A
          11113 R 052354 A
          11114 R 401411 A
          11115 R 154006 A
          11116 R 251603 A
          11117 R 241117 A
          11120 R 162345 A
          11121 R 740000 A
4520      11122 R 221301 A      SCM19A      .SIXBT      'RKA      DISKCART: N FILES, I/O, ALL MODES, ALL FUNCTIONS%<'
          11123 R 404040 A
          11124 R 041123 A
          11125 R 130301 A
          11126 R 222472 A
          11127 R 401640 A
          11130 R 061114 A
          11131 R 052354 A
          11132 R 401157 A
          11133 R 175440 A
          11134 R 011414 A
          11135 R 401517 A
          11136 R 040523 A
          11137 R 544001 A
          11140 R 141440 A
          11141 R 062516 A
          11142 R 032411 A
          11143 R 171623 A
          11144 R 457400 A
4521      11145 R 221302 A      SCM19B      .SIXBT      'RKB      DISKCART: N FILES, I/O, ALL MODES, LIM FUNCTIONS%<'
          11146 R 404040 A
          11147 R 041123 A
          11150 R 130301 A
          11151 R 222472 A
          11152 R 401640 A
          11153 R 061114 A
          11154 R 052354 A
          11155 R 401157 A
          11156 R 175440 A
          11157 R 011414 A
          11160 R 401517 A
          11161 R 040523 A
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	11162 R 544014 A	
	11163 R 111540 A	
	11164 R 062516 A	
	11165 R 032411 A	
	11166 R 171623 A	
4522	11167 R 457400 A	
	11170 R 221303 A	SCM19C .SIXBT 'RKC DISKCART: N FILES, INPUT, ALL MODES, LIM FUNCTIONS%<<'
	11171 R 404040 A	
	11172 R 041123 A	
	11173 R 130301 A	
	11174 R 222472 A	
	11175 R 401640 A	
	11176 R 061114 A	
	11177 R 052354 A	
	11200 R 401116 A	
	11201 R 202524 A	
	11202 R 544001 A	
	11203 R 141440 A	
	11204 R 151704 A	
	11205 R 052354 A	
	11206 R 401411 A	
	11207 R 154006 A	
	11210 R 251603 A	
	11211 R 241117 A	
	11212 R 162345 A	
4523	11213 R 740000 A	
	11214 R 152401 A	SCM20 .SIXBT 'MTA MAGTAPE: 3 FILES, I/O, ALL MODES, ALL FUNCTIONS%<<'
	11215 R 404040 A	
	11216 R 150107 A	
	11217 R 240120 A	
	11220 R 057240 A	
	11221 R 634006 A	
	11222 R 111405 A	
	11223 R 235440 A	
	11224 R 115717 A	
	11225 R 544001 A	
	11226 R 141440 A	
	11227 R 151704 A	
	11230 R 052354 A	
	11231 R 400114 A	
	11232 R 144006 A	
	11233 R 251603 A	
	11234 R 241117 A	
	11235 R 162345 A	
4524	11236 R 740000 A	
	11237 R 152403 A	SCM21 .SIXBT 'MTC MAGTAPE: 1 FILE, INPUT, IOPS MODES, ALL FUNCTIONS%<<'
	11240 R 404040 A	
	11241 R 150107 A	
	11242 R 240120 A	
	11243 R 057240 A	
	11244 R 614006 A	
	11245 R 111405 A	

11246 R 544011 A  
11247 R 162025 A  
11250 R 245440 A  
11251 R 111720 A  
11252 R 234015 A  
11253 R 170405 A  
11254 R 235440 A  
11255 R 011414 A  
11256 R 400625 A  
11257 R 160324 A  
11260 R 111716 A  
11261 R 234574 A  
11262 R 152406 A  
11263 R 404040 A  
11264 R 150107 A  
11265 R 240120 A  
11266 R 057240 A  
11267 R 161716 A  
11270 R 550611 A  
11271 R 140540 A  
11272 R 172211 A  
11273 R 051624 A  
11274 R 050440 A  
11275 R 061722 A  
11276 R 400664 A  
11277 R 405617 A  
11300 R 242345 A  
11301 R 740000 A  
11302 R 142001 A  
11303 R 404040 A  
11304 R 141116 A  
11305 R 054020 A  
11306 R 221116 A  
11307 R 240522 A  
11310 R 724017 A  
11311 R 252420 A  
11312 R 252454 A  
11313 R 400123 A  
11314 R 031111 A  
11315 R 401517 A  
11316 R 040523 A  
11317 R 544001 A  
11320 R 141440 A  
11321 R 062516 A  
11322 R 032411 A  
11323 R 171623 A  
11324 R 457400 A  
11325 R 030402 A  
11326 R 404040 A  
11327 R 030122 A  
11330 R 044022 A  
11331 R 050104 A

4525

SCM22 .SIXBT 'MTF MAGTAPE: NON-FILE ORIENTED FOR F4 .OTS%&lt;'

4526

SCM23 .SIXBT 'LPA LINE PRINTER: OUTPUT, ASCII MODES, ALL FUNCTIONS%&lt;'

4527

SCM24 .SIXBT 'CDB CARD READER: INPUT, IOPS ASCII MODE, ALL FUNCTIONS%&lt;'

11332 R 052272 A  
11333 R 401116 A  
11334 R 202524 A  
11335 R 544011 A  
11336 R 172023 A  
11337 R 400123 A  
11340 R 031111 A  
11341 R 401517 A  
11342 R 040554 A  
11343 R 400114 A  
11344 R 144006 A  
11345 R 251603 A  
11346 R 241117 A  
11347 R 162345 A  
11350 R 740000 A  
11351 R 262001 A  
11352 R 404040 A  
11353 R 262040 A  
11354 R 041123 A  
11355 R 201401 A  
11356 R 317240 A  
11357 R 172524 A  
11360 R 202524 A  
11361 R 544001 A  
11362 R 230311 A  
11363 R 114001 A  
11364 R 160440 A  
11365 R 042515 A  
11366 R 204015 A  
11367 R 170405 A  
11370 R 235440 A  
11371 R 011414 A  
11372 R 400625 A  
11373 R 160324 A  
11374 R 111716 A  
11375 R 234574 A  
11376 R 262401 A  
11377 R 404040 A  
11400 R 262455 A  
11401 R 616572 A  
11402 R 401157 A  
11403 R 174574 A  
11404 R 303101 A  
11405 R 404040 A  
11406 R 402014 A  
11407 R 172424 A  
11410 R 052272 A  
11411 R 401725 A  
11412 R 242025 A  
11413 R 245440 A  
11414 R 012303 A  
11415 R 111140 A

4528

SCM25 .SIXBT 'VPA VP DISPLAY: OUTPUT, ASCII AND DUMP MODES, ALL FUNCTIONS%&lt;'

4529

SCM27 .SIXBT 'VTA VT-15: I/O%&lt;'

4530

SCM27A .SIXBT 'XYA PLOTTER: OUTPUT, ASCII &amp; BINARY MODES, ALL FUNCTIONS%&lt;'



11416 R 464002 A  
11417 R 111601 A  
11420 R 223140 A  
11421 R 151704 A  
11422 R 052354 A  
11423 R 400114 A  
11424 R 144006 A  
11425 R 251603 A  
11426 R 241117 A  
11427 R 162345 A  
11430 R 740000 A  
11431 R 141301 A  
11432 R 404040 A  
11433 R 141355 A  
11434 R 636540 A  
11435 R 130531 A  
11436 R 021701 A  
11437 R 220472 A  
11440 R 401116 A  
11441 R 202524 A  
11442 R 544001 A  
11443 R 230311 A  
11444 R 114015 A  
11445 R 170405 A  
11446 R 235440 A  
11447 R 011414 A  
11450 R 400625 A  
11451 R 160324 A  
11452 R 111716 A  
11453 R 234574 A  
11454 R 516271 A  
11455 R 150100 A  
11456 R 416210 A  
11457 R 144634 A  
11460 R 202372 A  
11461 R 242212 A  
11462 R 510320 A  
11463 R 000000 A  
11464 R 045004 A  
11465 R 020100 A  
11466 R 201001 A  
11467 R 500000 A

4531

SCM28 .SIXBT 'LKA LK-35 KEYBOARD: INPUT, ASCII MODES, ALL FUNCTIONS%&lt;'

4532

SCM26 .ASCII 'SKIP CHAIN ORDER'&lt;15&gt;

4533

SCMSKP .ASCII &lt;11&gt;' '&lt;15&gt;

4534  
4535  
4536  
4537

.TITLE X/M/DOS NRM PATCH AREA

11470 R A PATCH .BLOCK 20  
.LTORG

/(RKB-108) ASSEMBLE THE LITERALS

11510 R 060000 A \*L  
11511 R 016100 A \*L  
11512 R 017100 A \*L  
11513 R 017077 A \*L  
11514 R 000124 A \*L  
11515 R 000123 A \*L  
11516 R 000107 A \*L  
11517 R 000104 A \*L  
11520 R 000100 A \*L  
11521 R 156274 A \*L  
11522 R 021613 A \*L  
11523 R 000141 A \*L  
11524 R 233123 A \*L  
11525 R 000125 A \*L  
11526 R 000142 A \*L  
11527 R 200000 A \*L  
11530 R 000002 A \*L  
11531 R 000152 A \*L  
11532 R 020000 A \*L  
11533 R 000147 A \*L  
11534 R 010021 R \*L  
11535 R 577777 A \*L  
11536 R 176000 A \*L  
11537 R 010000 A \*L  
11540 R 014000 A \*L  
11541 R 022000 A \*L  
11542 R 026000 A \*L  
11543 R 004000 A \*L  
11544 R 007700 A \*L  
11545 R 010100 A \*L  
11546 R 770000 A \*L  
11547 R 150000 A \*L  
11550 R 640001 A \*L  
11551 R 000171 A \*L  
11552 R 000001 A \*L  
11553 R 000134 A \*L  
11554 R 000156 A \*L  
11555 R 773777 A \*L  
11556 R 017777 A \*L  
11557 R 001766 A \*L  
11560 R 000016 A \*L  
11561 R 000557 R \*L  
11562 R 000017 A \*L  
11563 R 777722 A \*L  
11564 R 600542 R \*L  
11565 R 740000 A \*L  
11566 R 000012 A \*L  
11567 R 010013 R \*L

11570 R 774000 A \*L  
11571 R 000177 A \*L  
11572 R 621725 R \*L  
11573 R 700000 A \*L  
11574 R 000077 A \*L  
11575 R 000040 A \*L  
11576 R 000175 A \*L  
11577 R 000015 A \*L  
11600 R 747777 A \*L  
11601 R 003542 R \*L  
11602 R 077777 A \*L  
11603 R 003511 R \*L  
11604 R 003557 R \*L  
11605 R 003551 R \*L  
11606 R 003555 R \*L  
11607 R 003556 R \*L  
11610 R 000007 A \*L  
11611 R 000760 A \*L  
11612 R 000014 A \*L  
11613 R 242401 A \*L  
11614 R 031504 A \*L  
11615 R 000010 A \*L  
11616 R 536160 A \*L  
11617 R 003567 R \*L  
11620 R 003560 R \*L  
11621 R 000070 A \*L  
11622 R 777760 A \*L  
11623 R 142040 A \*L  
11624 R 032240 A \*L  
11625 R 010007 R \*L  
11626 R 003602 R \*L  
11627 R 003576 R \*L  
11630 R 003574 R \*L  
11631 R 003572 R \*L  
11632 R 003612 R \*L  
11633 R 003604 R \*L  
11634 R 777777 A \*L  
11635 R 000700 A \*L  
11636 R 777000 A \*L  
11637 R 002713 R \*L  
11640 R 000011 A \*L  
11641 R 003425 R \*L  
11642 R 003273 R \*L  
11643 R 000300 A \*L  
11644 R 010113 R \*L  
11645 R 304000 A \*L  
11646 R 003777 A \*L  
11647 R 010155 R \*L  
11650 R 010166 R \*L  
11651 R 010177 R \*L  
11652 R 010213 R \*L  
11653 R 010221 R \*L

11654 R 000060 A \*L  
11655 R 000020 A \*L  
11656 R 010261 R \*L  
11657 R 000154 A \*L  
11660 R 010357 R \*L  
11661 R 010305 R \*L  
11662 R 007777 A \*L  
11663 R 004342 R \*L  
11664 R 100471 R \*L  
11665 R 100506 R \*L  
11666 R 011464 R \*L  
11667 R 000057 A \*L  
11670 R 004621 R \*L  
11671 R 070040 A \*L  
11672 R 000150 A \*L  
11673 R 005002 R \*L  
11674 R 000072 A \*L  
11675 R 000003 A \*L  
11676 R 677777 A \*L  
11677 R 100000 A \*L  
11700 R 777577 A \*L  
11701 R 400000 A \*L  
11702 R 000133 A \*L  
11703 R 777776 A \*L  
11704 R 777775 A \*L  
11705 R 000033 A \*L  
11706 R 000120 A \*L  
11707 R 777773 A \*L  
11710 R 000004 A \*L  
11711 R 005460 R \*L  
11712 R 000200 A \*L  
11713 R 000113 A \*L  
11714 R 737777 A \*L  
11715 R 040000 A \*L  
11716 R 000212 A \*L  
11717 R 000206 A \*L  
11720 R 000207 A \*L  
11721 R 020124 A \*L  
11722 R 000210 A \*L  
11723 R 000213 A \*L  
11724 R 000211 A \*L  
11725 R 006125 R \*L  
11726 R 707777 A \*L  
11727 R 600000 A \*L  
11730 R 070000 A \*L  
11731 R 030401 A \*L  
11732 R 777700 A \*L  
11733 R 202200 A \*L  
11734 R 030400 A \*L  
11735 R 000074 A \*L  
11736 R 006126 R \*L  
11737 R 000076 A \*L

11740 R 002004 A \*L  
11741 R 002001 A \*L  
11742 R 002002 A \*L  
11743 R 002003 A \*L  
11744 R 006253 R \*L  
11745 R 000111 A \*L  
11746 R 741000 A \*L  
11747 R 000170 A \*L  
11750 R 000053 A \*L  
11751 R 000054 A \*L  
11752 R 000055 A \*L  
11753 R 777771 A \*L  
11754 R 000005 A \*L  
11755 R 000006 A \*L  
11756 R 000777 A \*L  
11757 R 000126 A \*L  
11760 R 230322 A \*L  
11761 R 000355 A \*L  
11762 R 500000 A \*L  
11763 R 377777 A \*L  
11764 R 200107 A \*L  
11765 R 111723 A \*L  
11766 R 000013 A \*L  
11767 R 200503 A \*L  
11770 R 032420 A \*L  
11771 R 251103 A \*L  
11772 R 000045 A \*L  
11773 R 001205 R \*L  
11774 R 030402 A \*L  
11775 R 142001 A \*L  
11776 R 637777 A \*L  
11777 R 477777 A \*L  
12000 R 300000 A \*L

4538

4539

4540

4541

4542

PROG&gt;4K

000000 A

SIZE=12200

752 ERROR LINES

ERROR  
ERROR

.IFNZ -16100-20 / (RKB-210) ARE WE TOO BIG?

THE NON-RESIDENT MONITOR HAS OVERLAPPED

THE SPACE ALLOCATED FOR SGNBLK, ET. AL.

.ENDC

.END

/ (RKB-210)

APIOFF	005170	2701	2705*						
APION	005166	2700	2702*						
ARG	000000	176*	408	412	416	420	424	428	432
		436	441	445	449	453	457	461	465
		469	473	478	483	487	3264		
ASGNXT	06316	3411*	3434						
ASGUNT	06401	3439	3462*						
ASGUT1	06412	3471*							
ASPRUN	06374	3427	3450	3457*					
ASTD41	06351	3438*	3447						
ASTS40	06346	3416	3435*						
ASTU1	06561	3422	3576*						
ASTU2	06546	3563*	3581	3608					
BADATE	000406	455*	2302	2327	2355				
BADBOS	000425	475*	4281	4285	4315	4319			
BADCHN	000417	467*	3277						
BADGET	000375	443*	3212	3233	3351	3353	3357	3376	3378
		3382	3387	3389	3393				
BADHNO	000422	471*	4164						
BADIGT	000403	451*	4417	4420					
BADINS	000400	447*	1857	1861					
BADLIM	000414	463*	2592						
BADMSZ	01650	487	845*						
BADTIM	000411	459*	2482	2495					
BADUNT	000432	481*							
BANKBT	07666	181	183	186	191	517	1892	1900	4332*
BCHER	06122	3118	3263*						
BCHOK	06061	3213*	3244						
BELLS	02054	997	1003*						
BEXTSW	06036	3188*							
BOSERR	01614	478	841*						
BOSOUT	00457	500	507	513*					
BOSS15	07272	344	772	3984*					
BOSTMP	07313	3992	3997	3998	3999	4001*			
BOSTTY	05006	476	995	998	1011	2372	2516	2527	2534
		2544*	2547	2550					
BTERM	06113	3158	3170	3181	3203	3232	3253*	3255	3257
		3258	3259						
BTMP	06125	3094	3096	3104	3109	3110	3112	3119	3124
		3128	3148	3195	3197	3200	3210	3221	3241
		3266*							
CHNERR	01560	469	837*						
CHNSIX	07315	1291	3095	3179	3196	3348	3359	3384	3395
		3971	3977	4012*	4053	4060			
CLEXIT	00167	271	274	279	291*				
CMDISE	001220	738	789*						
CMDISP	01135	595	738*	738					
CODERR	01414	420	821*						
COMAND	010007	4013	4014	4031	4037	4038	4047	4052	4474*
		4475							
COMBLK	017077	190	256	258	4084	4447*			
CTRLC	007636	261	4303*						
CTRLP	000305	267	370*	566					

CT1	06750	218 3741 4259	220 3750	223 3752	229 3760	3556 3762	3558 3801	3728* 3811	3739 4257
CURPRO	10341	2054	2057	2221	4499*				
DATERR	01502	457	829*						
DATEXC	03573	1314	1825*						
DATFCL	03605	1319	1834*						
DATLOD	03577	1308	1829*						
DATM12	07725	198 4305	199 4365*	202	381	384	562	565	573
DATM14	07726	4366*							
DATM15	07727	4367*							
DATM2	07672	233	4336*						
DATSTP	07023	255	2604	3784*	3819				
DAT.CE	007064	3815	3818*						
DAT.ON	007031	3787	3790*						
DAT1	07673	235	1186	4337*					
DAT5	07670	237	4282	4316	4334*				
DAT6	07671	239	3788	3817	4286	4320	4335*		
DAT6SV	07065	3789	3816	3820*					
DDT	01116	726*	1295						
DEV/CNT	04432	2167	2178	2263*					
DEV/CTP	04434	2180	2186	2265*					
DGITCK	007761	2413	2415	3634	4414*	4421			
DIGERR	01462	453	827*						
DOMODE	05326	396	2839	2844*	2931				
DTCONV	04631	2299	2324	2351	2411*	2423	2473	2492	
DTDAY	004505	2306	2312*						
DTDAY1	004517	2323*	2336						
DTDAY2	004527	2320	2332*						
DTECHO	004564	2280	2282	2287	2289	2365*			
DTLIN	04617	2367	2374	2399*					
DTMON1	004471	2298*	2311						
DTMON2	004501	2295	2307*						
DTPRNT	04576	1887	2369	2377*	2396				
DTRCON	04646	2062 2523	2382	2388	2393	2431*	2449	2509	2514
DTRDON	004657	2438	2441*						
DTRLP	004651	2434*	2440						
DTTMP1	04625	2292 2363 2443 3905	2308 2400* 2469	2310 2414 2488	2317 2416 2569	2333 2420 2574	2335 2421 2626	2342 2433 2634	2361 2439 3902
DTTMP2	04626	2297 2422	2309 2435	2322 2446	2334 2472	2349 2491	2362 2556	2401* 2581	2412 2585
DTYEAR	004533	2331	2337*						
DTYR1	004547	2350*	2364						
DTYR2	004560	2345	2347	2360*					
D.LOOP	07044	3802*	3812						
ENDCHK	007245	3932	3950*						
ENDEXC	03574	1312	1826*						
ENDFCL	03612	1317	1839*						
ENDLOD	03602	1306	1832*						

ERRORS	03640	1855	1859	1876*					
EXECUT	01106	722*	1297	3978	3980				
EXITLT	07665	4331*							
FCOMK	07403	1323	4062	4080*	4101				
FCOMTP	07430	4081	4090	4102*	4117	4127			
FCOMT1	07431	4082	4083	4094	4103*	4118	4119	4131	
FCOM1	07410	4085*	4098						
FCOM2	07423	4092	4096*						
FCOM3	007426	4095	4099*						
FETER	01374	441	817*						
FETTMP	07066	3826*	3828	3842	3846	3848	3853	3865	3881
FETUER	00372	440*	3229	3579	3587	3604	3614	3697	3699
		3701	3703	3838	3840	3851	3864	3867	3869
		3880							
FETUIC	07067	3224	3580	3607	3694	3711	3827*	3876	3882
FETU1	07073	3831*	3847						
FETU2	07114	3836	3848*						
FETU3	07134	3856	3859	3861	3863	3865*			
FILES	017110	2061	3680	4463*					
FIL1	06632	3625*	3641						
FIL2	06653	3627	3629	3631	3644*				
FIONM	07467	1137	1250	1383	4156*	4168			
FIONO	07504	3150	3467	3995	4178*	4185	4191	4192	4280
		4284	4314	4318					
FIO1	07476	4163*	4166						
FIO2	07512	4184*	4189						
FIO3	07520	4187	4190*						
FLUSH	000276	359*	409	413	417	421	425	429	433
		437	442	446	450	454	458	462	466
		470	474	484	488	3265			
FOCAL	03603	1293	1833*						
FORMFD	01554	536	835*						
PSYSK	07433	4066	4116*	4138					
PSYS1	07441	4122*	4135						
PSYS2	07454	4129	4133*						
PSYS3	007457	4132	4136*						
FULCMD	00764	594	683*						
FULWD	06353	3431	3440*						
FULWD1	06367	3442	3452*						
GET	06250	3337	3340	3342	3346	3363	3364	3365*	
GETC	06253	3358	3360	3368*	3394	3396			
GETERR	01402	445	819*						
GETPTS	006214	3327	3330	3333	3336*				
GLOAD	01114	725*	1301						
HANNAM	07546	4159	4165	4167	4179	4186	4220*		
HANNO	07545	3475	4157	4183	4188	4190	4219*		
HDR	MACRO	168	792	794	796	798	800	802	804
		806	808	810	812	814	816	818	820
		822	824	826	828	830	832	834	836
		838	840	842	844				
HNOERR	01576	473	839*						
ILLCOD	000353	418*	2633						
ILLONF	000356	422*	2659						



INS	003633	1854	1869*						
INSALL	03642	1870	1872	1877*					
INSER	01444	449	825*						
INSERR	03644	1863	1865	1878*					
KEEPON	005072	2599	2606*						
KLAPI	005163	769	2697*						
KLASI	06307	744	3404*	3570					
KLBADU	00350	415*	3461						
KLBANK	005672	773	3031*						
KLBAT	05706	770	3073*						
KLBAT1	05745	3103	3112*						
KLBAT2	05760	3111	3114	3124*					
KLBAT3	06002	3157*							
KLBAT4	06010	3166*	3169						
KLBAT5	06020	3174*	3235						
KLBAT6	06056	3159	3171	3210*					
KLBAT7	06067	3173	3221*						
KLBAT8	06107	3182	3194	3204	3241*				
KLBBGM	00367	435*	608						
KLBDAT	00361	427*	3500	3512	3542	3546	3553		
KLBT5A	06027	3181*	3188						
KLBUFF	01322	416	809*						
KLBUFFD	01340	811*	1024						
KLBUFF	010017	283	284	352	353	1013	1027	1031	3923
		3941	4477*						
KLBUFFG	01346	813*	3264						
KLBUFFH	01356	436	815*						
KLBUFF1	01222	408	793*						
KLBUFF2	01234	276	795*						
KLBUFF3	01244	351	797*						
KLBUFF4	01250	412	799*						
KLBUFF5	01256	428	801*						
KLBUFF6	01266	390	401	803*					
KLBUFF7	01272	432	805*						
KLBUFF8	01304	282	807*						
KLCGET	006205	751	3325*						
KLCGTP	006207	753	3328*						
KLCHAR	07675	588	2278	2455	2617	3157	3167	3180	3187
		3202	3231	3299	3319	3338	3349	3374	3385
		3424	3428	3438	3444	3453	3471	3480	3496
		3501	3503	3507	3564	3633	3639	3894	3899
		3904	4340*						
KLCHR2	07676	884	889	909	926	4341*			
KLCNT	07677	640	958	964	3921	4342*			
KLCNTB	07716	975	979	4357*					
KLCNTT	07723	628	671	4363*					
KLCOM	010007	590	646	650	654	658	668	1081	1087
		1290	1292	1322	1411	1425	1852	1858	1864
		1866	1871	1873	2653	3175	3192	3272	3292
		3293	3294	3295	3296	3344	3355	3380	3391
		3404	3429	3433	3435	3440	3462	3465	3466
		3623	3635	3640	3646	3970	3979	3981	3987
		3989	4059	4061	4065	4294	4475*	4476	

KLCOMP	07700	597	599	600	604	605	609	625	626
		627	674	676	678	4343*			
KLCOM2	010013	631	635	636	637	638	647	651	655
		659	664	4476*	4477				
KLCRR	002076	1020	1022*						
KLDATD	07713	3478	3504	3508	3510	3519	3521	3530	3539
		3544	3547	3554	4354*				
KLDATE	004445	290	747	2277*					
KLDDT	007257	782	3968*						
KLDDTN	007257	783	3969*						
KLDEVC	07712	3476	3557	4353*					
KLDIRC	07155	3885*	3890	3892	3893	3908			
KLDIRF	07715	622	960	961	3919	4356*			
KLEXEC	07262	778	3975*						
KLFSIX	02005	641	957*	982	3926	3951	3956		
KLFSXT	02015	959	965*						
KLGET	01664	852*	870	951	1016	1490	2283	2293	2313
		2315	2318	2338	2340	2343	2460	2470	2486
		2489	2558	2638	2771	3166	3186	3226	3230
		3305	3314	3411	3443	3452	3457	3479	3582
		3609	3620	3625	3831	3857	3886	3903	
KLGETP	07701	285	354	855	856	858	859	949	1032
		1487	4344*						
KLGETS	006213	755	3334*						
KLGETT	006211	754	3331*						
KLGET5	07702	287	356	853	862	947	1034	1489	4345*
KLGL0	007257	781	3967*						
KLGPOT	006254	756	3373*						
KLGUNT	07156	3886*	3888						
KLHALF	05643	760	2994*						
KLHALT	002144	750	1066*						
KLILLD	00345	411*	3151	3451	3468				
KLINS	003613	742	1849*						
KLJ57	01725	887	891*						
KLKEEP	005062	746	2597*						
KLLA30	005150	767	2680*						
KLLOA	007257	780	3966*						
KLLOG	002037	739	988*						
KLLOGW	002116	740	1039*						
KLLP	005653	768	3006*						
KLMIN	06461	3495	3510*						
KLMODE	005324	787	2838*						
KLMSIZ	005235	786	2768*						
KLNASI	06422	3479*	3483	3491	3509	3515			
KLNBIF	06625	775	3620*						
KLND57	01762	899	902	916	920*				
KLNLIN	006713	752	3689*						
KLNLOT	06660	757	3652*	3715					
KLNMIC	006732	759	3709*						
KLNM0D	00364	431*	3527	3529	3538				
KLNONE	07741	3441	4377*						
KLOK	000320	341	365	382*	592	779	994	1002	1058
		1062	1063	1069	1074	1349	2173	2359	2375

		2499	2537	2589	2605	2611	2620	2622	2636
		2840	3041	3048	3285	3418	3566	3648	3723
KLOKLF	000320	383*	3420	3568					
KLOKRD	00263	345	349	352*	388				
KLOK1	00256	347*	395	403	788				
KLPAGE	005667	774	3023*						
KLPGOT	06203	3308	3310	3312	3319*				
KLPGSH	06147	589	1080	1851	2652	3093	3174	3191	3271
		3291*	3320	3343	3354	3379	3390	3975	
KLPLR	005310	771	2817*						
KLPOS	07724	630	670	675	4364*				
KLPOSD	06505	3518	3523	3530*					
KLPRO	005077	745	2616*						
KLPR1	05117	2628	2630	2632	2634*				
KLPUT	01714	644	882*	927	954	1147	1167	1259	1267
		1392	1453	1459	1476	1491	1758	1783	1889
		1891	1917	1922	1928	1932	1942	1947	1953
		1957	1966	1970	2076	2081	2087	2091	2197
		2204	2371	2533	2909	2915	2921	2926	2954
		2965	2973	2976	2978	2980	3313	3936	3939
		3944	3945	3946	3947				
KLPUTP	07703	632	898	906	907	908	921	922	925
		1109	1202	1343	1886	1910	1935	1960	2060
		2067	2195	2368	2503	2847	3297	3924	4346*
KLP1	06160	3300*	3306						
KLREQ	002154	743	1079*						
KLRXT	06167	3304	3307*	3315					
KLSCOM	003646	741	1883*						
KLSIGN	07714	3477	3514	3516	4355*				
KLTABL	00667	593	619*	620	621	623	624	673	677
		679							
KLTDU	02130	749	1052*						
KLTIME	004667	748	2454*						
KLUC15	005222	785	2751*						
KLVT	05177	764	2722*						
KLWD1	07706	857	872	874	4349*				
KLWD2	07707	860	865	871	4350*				
KLWD3	07710	864	867	4351*					
KLWHAT	000342	406*	758	761	762	763	765	3075	3162
		3177	3185	3199	3205	3223	3236	3243	3996
		4016	4087	4124					
KLX/M	005207	784	2734*						
KL.BNK	005701	3027	3034	3043*					
KL.PGE	005675	3026	3035	3037*					
KL33TY	005135	766	2664*						
KL5GET	01677	854	863*						
KL57	07711	633	886	918	920	923	1107	1200	1341
		1884	1908	1933	1958	2058	2065	2193	2366
		2501	2845	3298	3406	3412	3577	3830	3832
		3925	4352*						
KL571	01732	891	896*						
KL571A	01734	898*	913						
KL572	01736	892	900*						

KL573	01741	893	903*						
KL574	01754	894	914*						
KL575	01757	895	917*						
KL6GET	01701	865*	875						
KL7C	06137	3274	3278*						
KL7OR9	06130	776	3271*						
KL9C	06140	3276	3279*						
KPRNT	05600	2860	2950*	2983					
KPTMP	05642	2952	2981	2984*					
LBOSS	01070	716*	3986	3988					
LDBOSS	007616	4069	4278*						
LDRUIC	007550	209	211	226	4233*	4261	4287	4322	
LEADSP	06310	3405*	3437						
LIMBAD	05057	2568	2590*						
LIMER	10003	4426	4432	4434*					
LIMERR	01526	465	833*						
LOAD	01112	724*	1299						
LOADSY	007367	596	4000	4058*					
LOGEND	002041	991*	1014	1018					
LOGFLG	06712	3688*	3693	3695	3710	3712	3854		
LOGWF	02113	371	989	992	1036*	1040			
LOG1	002061	990	1006*	1035	1049				
LOG2	002070	1010	1015*	1021					
LPADDR	07731	200	564	4369*					
LPOFF	05663	3009	3015*						
LPON	05656	3008	3010*						
LQFILE	01047	706*							
LSGNBL	07735	189	2147	4204	4373*				
LSHFT6	07747	915	966	1768	2328	2380	2445	2448	2496
		2507	2517	2528	3432	3845	4048	4391*	4395
LSPAC	07071	3829*	3850						
LTTYON	005156	2682	2687*						
MANSAP	07740	2068	4376*						
MEM1	05236	2771*	2773	2790					
MEM2	05262	2777	2780	2791*					
MEM3	05266	2793	2795*						
MIC	017111	3713	4464*						
MICHEK	007150	3871	3873	3875	3877*				
MODBUF	05456	2846	2930	2932*					
MODESW	04630	2403*							
MPRINT	07204	2152	3916*	3917	3918	3954			
MPTMP0	07256	3948	3959	3961*					
MPUT	007227	3935*	3953	3958					
MP1	05344	2854	2858*						
MP10	05424	2902	2906*						
MP11	05426	2889	2905	2908*					
MP12	05451	2927*							
MP2	05346	2857	2860*						
MP3	05347	2861*							
MP4	05361	2867	2871*						
MP5	05363	2864	2870	2873*					
MP6	05376	2880	2884*						
MP7	05400	2876	2883	2886*					

MP8	05413	2893	2897*						
MP9	05415	2896	2899*						
MSCRLF	07231	3930	3938*						
MSG	MACRO	155	1732	1733	1734	1735	1736	1737	1738
		1739	1740	1741	1742	1743	1744	1747	1748
		1749	1750						
MSGTAB	003273	156	1486	1712*					
MSNXTC	07216	3926*	3928	3937	3949				
MSNXTM	07213	3923*	3942						
MSTAB	07236	3943*	3960						
MSZBAD	000435	485*	2789	2794	2800	2804			
MS10	03343	1721*							
MS11	03351	1722*							
MS12	03355	1723*							
MS13	03361	1724*							
MS14	03367	1725*							
MS17	03373	1726*							
MS18	03401	1727*							
MS19	03405	1728*							
MS2	03273	1713*							
MS20	03415	1729*							
MS3	03277	1714*							
MS4	03303	1715*							
MS5	03317	1717*							
MS6	03307	1716*							
MS7	03325	1718*							
MS8	03327	1719*							
MS9	03335	1720*							
MTABLE	03425	1483	1730*						
MT7	07745	3273	4382*						
MT9	07746	3275	4384*						
NEWVAL	05307	2775	2785	2791	2812*				
NEXTCM	00703	631*	672						
NHAN	07523	4163	4184	4201*	4205	4211	4212		
NHAN1	07524	4202*	4218						
NHAN2	07537	4209	4213*						
NODAT	017102	241	2115	2163	3733	3797	4457*		
NOPAR	017101	240	2114	2162	3735	3794	4456*		
NOSETP	00116	249	253	256*					
NOSKP	017103	242	2118	2158	2164	4458*			
NOUNIT	007202	3898	3906*						
NRMEXI	007643	480	2671	2676	2686	2692	2712	2729	2741
		2746	2758	2763	2810	2827	2832	3001	3014
		3018	4309*						
NRM.1	007656	4312	4321*						
NRM.2	007663	366	3683	4327*					
NR.DAY	000440	297	299	321	326	328	334	335	336
		496*							
NSAME	00741	649	653	657	661*				
NXNSAM	00752	663	670*						
NXTCHR	00715	641*	645						
OFF	07744	2657	4380*						
OLDTOT	05306	2770	2781	2786	2795	2802	2805	2811*	

ON	07743	2654	4378*						
ONFERR	01430	424	823*						
ONOFF	005124	2598	2650*	2655	2656	2658	2665	2681	2699
		2722	2736	2753	2819	2994	3007	3025	3033
PAPI	05530	2869	2937*						
PATCH	11470	4536*							
PBNK	05514	2859	2935*						
PCKDON	00722	643	646*						
PCR	05576	2928	2945*						
PIP	03575	1827*							
PLIMCN	07770	2300	2325	2353	2480	2493	2566	4423*	4427
		4433	4434	4436					
PLIMTM	10006	4424	4430	4435	4437*				
PLOADC	01205	778*	4063						
PLROFF	05320	2821	2829*						
PNAPI	05534	2872	2938*						
PNPLR	05570	2907	2944*						
PNUC15	05554	2898	2942*						
PNX/M	05544	2885	2940*						
PPAG	05522	2856	2936*						
PPLR	05562	2904	2943*						
PRCHK	005100	2618*	2639						
PRCHK1	005122	2624	2637*						
PRDAT	06467	3485	3487	3489	3493	3516*			
PRERR	00460	407	411	415	419	423	427	431	435
		440	444	448	452	456	460	464	468
		472	477	482	486	514*	515	521	522
		3263							
PRINIT	00534	539	566*	568					
PRINT	000506	541	543*	548	551	574	575	1169	1269
		1454	1477	2105	2107	2156	2205	3940	
PRNFST	00471	532*	540	1093	1178	1433	1438	2095	
PRNF.1	000501	535	537*						
PRNTBF	00556	554	570	578*					
PRNXDT	06420	3470	3477*	3571	3592				
PROTCT	017113	2036	3666	4466*					
PRTMP	00554	203	380	385	563	572	576*	4304	
PRTMP1	00555	557	560	577*					
PRWRIT	000542	567	569*						
PUC15	05550	2895	2941*						
PX/M	05540	2882	2939*						
P1	07547	216	224	225	228	4162	4182	4202	4203
		4206	4210	4213	4215	4216	4217	4221*	4254
		4262	4264	4268					
P2	07402	1324	1325	4079*	4085	4096	4097	4100	
P3	07432	4115*	4122	4126	4133	4137			
REQDAT	000151	280*	362						
RESTOR	06661	3658*	3704						
RQALL	002167	1083	1092*						
RQALL1	002203	1106*	1175						
RQALL2	002217	1116	1119*						
RQALL3	002247	1145*	1158						
RQALL4	002264	1149	1161*						

RQDDT	002443	1296	1305*						
RQDM15	03537	1100	1135	1139	1148	1187	1248	1252	1260
		1345	1350	1368	1372	1374	1376	1379	1398
		1791*							
RQD2	03541	1096	1110	1112	1113	1118	1122	1172	1362
		1363	1380	1381	1385	1399	1400	1793*	
RQD2AL	003557	1114	1129	1811*					
RQD2BG	003542	1095	1117	1173	1361	1794*			
RQD2M2	003556	1127	1809*						
RQD2M3	003555	1125	1807*						
RQD2M7	003551	1123	1802*						
RQD3	03557	1197	1203	1205	1209	1210	1215	1218	1221
		1223	1228	1235	1272	1812*			
RQD3AL	003567	1195	1206	1821*					
RQD3BG	003560	1196	1227	1236	1238	1273	1813*		
RQEXEC	002450	1298	1311*						
RQFOCL	002454	1294	1316*						
RQHDR	03501	1094	1179	1439	1788*				
RQHDR1	02623	1434	1443*						
RQKLDG	02305	1186*	1352						
RQLIN	03511	1108	1170	1201	1270	1342	1455	1478	1789*
RQLOAD	002443	1300	1304*						
RQM2	02260	1128	1155*						
RQM3	02256	1126	1153*						
RQM7	02253	1124	1134	1150*					
RQPAK	03471	1770	1773	1775	1777*	1784			
RQPAK6	03456	1111	1138	1156	1165	1204	1242	1245	1251
		1265	1364	1384	1401	1766*	1776	2064	2199
		2202	2384	2390	2395	2521	2531		
RQPCLS	002633	1402	1445*	1456	1479				
RQPDAT	02711	1346	1469	1495*					
RQPEND	002615	1422	1436*						
RQPFLG	02622	1430	1437	1442*	1449	1461			
RQPLP1	002564	1408*	1421						
RQPLP2	002570	1413*	1427						
RQPMSG	002646	1451	1457*						
RQPMS1	002657	1467*	1474						
RQPMS2	002673	1470	1480*						
RQPMS3	02704	1490*	1494						
RQPMS4	02670	1477*	1493						
RQPNT	02621	1407	1409	1410	1414	1415	1416	1417	1418
		1419	1424	1428	1429	1431	1441*	1448	1462
		1466	1468	1471	1472	1481	1482	2094	2098
		2110	2120	2121	2150				
RQPOS	03576	1193	1225	1828*					
RQPRG	002425	1086	1090	1289*					
RQPRG1	002460	1303	1321*						
RQPRG2	002465	1327*	1333						
RQPRG3	002474	1274	1310	1336*	1403				
RQPSND	002601	1412	1423*						
RQPTBL	002713	1406	1498*						
RQPUSE	02561	1335	1405*	1435	1440	1465	1473		
RQP1	02712	1432	1447	1496*					

RQSPRG	02446	1309*	1315	1320					
RQTAB	03452	1120	1162	1230	1262	1366	1394	1756*	1759
RQTMP	03570	1767	1771	1774	1823*				
RQUM15	03540	1104	1164	1168	1191	1264	1268	1792*	
RQUSER	002300	1089	1177*						
RQUSR0	02302	1174	1180*						
RQUSR1	002321	1199*	1286						
RQUSR2	002345	1208	1220*						
RQUSR4	002350	1214	1219	1222	1224*				
RQUSR5	002354	1226	1229*						
RQUSR6	002374	1234	1240	1247*					
RQUSR7	02371	1237	1244*						
RQUSR8	02410	1243	1246	1260*					
RSHFT6	07754	897	1772	1912	1919	1937	1944	2040	2051
		2071	2078	2303	2387	2483	2513	2524	4397*
		4401							
SAME	00756	660	669	674*					
SAVE	07704	4019	4024	4025	4029	4030	4036	4041	4045
		4046	4051	4347*					
SAVEC	07705	4017	4020	4022	4026	4034	4039	4042	4348*
SCBANK	04424	1989	1991	2258*					
SCLP80	04435	2016	2018	2266*					
SCL120	04437	2024	2026	2267*					
SCL132	04441	2029	2031	2268*					
SCMAPI	10213	1977	2215	4492*					
SCMBRA	10120	1896	1899	2210	4484*				
SCMBUF	10357	2059	2222	4500*					
SCMCHN	10241	2003	2006	2218	4495*				
SCMCQR	10305	2066	2223	4497*					
SCMDAT	10155	1909	2212	4487*					
SCMFCB	10135	1904	1907	2211	4486*				
SCMHAN	004206	2100	2112*						
SCMHDR	10101	1885	2209	4482*					
SCMH.0	04215	2120*	2148	2154					
SCMH.1	04226	2129*	2140	2149					
SCMH.2	04253	2135	2150*						
SCMH.3	04242	2132	2141*						
SCMINC	004204	2102	2109*						
SCMLOP	004171	2097*	2111						
SCMLPS	10261	2017	2019	2025	2027	2030	2032	2034	2219
		4496*							
SCMLP1	04200	2096	2105*	2108					
SCMLP2	004311	2181*	2187						
SCMLP3	004320	2184	2189*						
SCMLUP	04302	2169	2174*	2188	2207				
SCMODE	10231	1990	1992	1995	1997	2217	4494*		
SCMPOS	10177	1959	2214	4491*					
SCMPRO	10323	2043	2046	2220	4498*				
SCMSKI	004260	2123	2155*						
SCMSKP	11464	2194	2206	4533*					
SCMTBL	004342	2093	2208*						
SCMUFD	10166	1934	2213	4489*					
SCMXVM	10221	1983	2216	4493*					



SCM01	10373	2224	4501*						
SCM1	004073	2012	2020	2028	2033*				
SCM10	10631	2234	4510*						
SCM11	10654	2235	4511*						
SCM12	10676	2236	4512*						
SCM13	10717	2237	4513*						
SCM14	10737	2238	4514*						
SCM15	10762	2239	4515*						
SCM16	11005	2240	4516*						
SCM17	11030	2241	4517*						
SCM18	11053	2242	4518*						
SCM19	11076	2243	4519*						
SCM19A	11122	2244	4520*						
SCM19B	11145	2245	4521*						
SCM19C	11170	2246	4522*						
SCM2	10405	2226	4502*						
SCM20	11214	2247	4523*						
SCM21	11237	2248	4524*						
SCM22	11262	2249	4525*						
SCM23	11302	2250	4526*						
SCM24	11325	2251	4527*						
SCM25	11351	2252	4528*						
SCM26	11454	2157	4532*						
SCM27	11376	2253	4529*						
SCM27A	11404	2254	4530*						
SCM28	11431	2255	4531*						
SCM3	10426	2227	4503*						
SCM4	10450	2228	4504*						
SCM5	10474	2229	4505*						
SCM6	10514	2230	4506*						
SCM7	10541	2231	4507*						
SCM8	10563	2232	4508*						
SCM9	10606	2233	4509*						
SCNINE	04443	2002	2269*						
SCOM20	017106	3670	4461*						
SCOM33	017112	3672	4465*						
SCOM4	017105	3668	4460*						
SCOM47	04627	2290	2305	2329	2330	2356	2402*		
SCOM50	05005	2467	2485	2497	2506	2512	2522	2543*	
SCPAGE	04422	1994	1996	2257*					
SCSEVN	04444	2005	2271*						
SCTEMP	04426	1895	1898	1903	1906	2042	2045	2053	2056
		2070	2077	2082	2088	2124	2125	2126	2134
		2175	2183	2259*					
SC.BDE	000212	3070*	3080	3132	3149				
SC.BFN	000206	3058*	3082	3083	3178				
SC.BFX	000210	3061*	3085	3201					
SC.BOS	000152	3055*	3073						
SC.BUI	000211	3069*	3088	3225					
SC.BUN	000213	3071*	3086	3107	3122				
SC.DAY	000147	160*	294						
SC.NMF	000142	3054*	3077	3078	3214	3216	3644	4307	4308
SC.RTF	000175	3057*	3081						

SC.SDV	000157	3056*							
SC.TDT	000171	159*	337						
SC.UIC	000141	3053*	3087						
SDADD	07730	4368*							
SDEV1	017104	1150	3993	4459*					
SETMD	07461	3682	4143*	4148					
SGNBLK	017100	185	188	2166	4448	4455*	4456	4457	4458
		4459	4460	4461	4462	4463	4464	4465	4466
SGNDEV	04430	2119	2127	2176	2261*				
SGNDVP	04433	2128	2129	2133	2136	2137	2141	2142	2143
		2145	2146	2177	2182	2185	2190	2192	2198
		2200	2201	2264*					
SGNSKP	04427	2117	2168	2170	2260*				
SGNTAB	07674	245	4161	4181	4338*				
SHAL	660000	177*							
SINGOK	07732	629	661	667	4370*				
SIXOK	02027	971	975*						
SIXROS	07722	634	972	3922	4362*				
SKPBOS	07314	586	3985	4003*	4067				
SKPCNT	04431	2160	2171	2262*					
SKPDAT	06557	3408	3522	3550	3574*	3591			
SKPUIC	06560	3410	3559	3575*	3589	3602	3606		
STAPI	04350	1972	1978	2215*					
STLP	04354	2008	2035	2219*					
STOPER	017777	363	601	4360*					
STST1	04013	1982	1985*						
STUFF	01772	944*	948	950	953	2855	2858	2868	2871
		2881	2884	2894	2897	2903	2906	2927	
STUFF1	02000	951*	955						
STUIC2	06602	3445	3454	3458	3481	3598*	3601	3616	
STXLM	04351	1973	1984	2216*					
SWI	07721	1181	1307	1313	1318	1326	1348	3280	3283
		4361*							
SYSBLK	016100	182	4438	4446*					
SYSLDR	007613	1867	1874	3972	3982	4068	4237	4239	4245
		4250	4267	4274*					
SYSLD1	007600	4258*	4266	4269					
SYSLD2	07626	4277	4287*						
SYSRES	00056	224*	230	288	360	2358			
TABCHK	007251	3934	3955*						
TDT.1	00245	324	332	336*					
TDT.2	000247	296	338*						
TEMP	07737	1484	1485	4375*					
TIMERR	01514	461	831*						
TIMLIM	005015	777	2555*	2560	2576	2583			
TIML.1	05042	2564	2577*						
TIML.2	05051	2562	2584*						
TMECHO	004736	2457	2459	2464	2466	2500*			
TMLIN	05000	2502	2536	2541*					
TMTMP1	05004	2510	2520	2526	2530	2542*	2557	2570	2575
		2577	2582	2584					
TTYON	005144	2666	2672*						
TV/CNT	07717	598	962	965	967	4064	4358*		

TYPE	00440	275	281	350	389	400	498*	501	511
		512	519	549	550	996	999	1012	1023
		2373	2535	2929					
UC15ON	05230	2754	2759*						
UFDUPD	06751	254	2603	3722	3729*	3764			
UFDUP1	07015	3740	3751	3761	3774*	3779			
UICDAT	06544	3549	3561*						
UICHEK	007120	3844	3852*						
UICS1	06542	3551	3559*						
UICS2	06547	3560	3564*						
UNIT	07720	4359*							
UNTERR	01636	483	843*						
UPAROP	02057	1000	1005*						
USER	03571	1084	1088	1824*					
WTIME	02114	378	1037*	1043					
WTIME1	02115	376	1038*	1048					
XVMON	05215	2737	2742*						
X1	017107	4462*							
.CLEAR	MACRO								
.CLOSE	MACRO								
.COMBL	07736	192	4086	4374*					
.DATAD	07667	195	222	1192	3540	3759	4256	4333*	
.DELETE	MACRO								
.ENTER	MACRO								
.EXIT	MACRO	3217	4328						
.FSTAT	MACRO								
.GET	MACRO	3365	3398						
.GTBUF	MACRO								
.GVBUF	MACRO								
.INIT	MACRO	267	566						
.MCD	000636	358	584*						
.MTAPE	MACRO								
.MTRAN	MACRO								
.OVRLA	MACRO								
.PUT	MACRO								
.RAND	MACRO								
.READ	MACRO	283	352						
.RENAM	MACRO								
.RTRAN	MACRO								
.SCOM	000100	159	160	193	197	201	204	210	213
		215	231	246	250	263	266	268	272
		277	291	293	339	347	373	379	386
		392	397	399	1974	1979	1985	2009	2047
		2498	2505	2588	2591	2635	2667	2670	2673
		2675	2683	2685	2688	2691	2708	2710	2711
		2725	2727	2728	2738	2740	2742	2745	2755
		2757	2759	2762	2809	2823	2826	2829	2831
		2848	2850	2910	2916	2922	2955	2997	2999
		3000	3039	3040	3045	3047	3053	3054	3055
		3056	3057	3058	3061	3069	3070	3071	3347
		3361	3365	3383	3397	3398	3647	3658	3659
		3662	3663	3665	3667	3669	3671	3673	3677
		3679	3681	3976	4240	4310	4323	4326	4339*

.SEEK	MACRO						
.SETUP	MACRO						
.SGNBL	07734	187	244	2116	3736	3795	4372*
.SYSBL	07733	184	257	4120	4123	4371*	
.SYSID	MACRO						
.TIMER	MACRO						
.TRAN	MACRO						
.USER	MACRO						
.WAIT	MACRO	289	357	571			
.WAITR	MACRO						
.WRITE	MACRO	536	570				
.XI/MOF	MACRO						
.XI/MON	MACRO						